LOC	OBJECT CODE	ADDR1	ADDR2	STMT

```
 2 ***************************************************************************
 3 *
 4 *           Zvector E6 instruction tests for VRI-g encoded:
 5 *
 6 *           E659 VSRP   - VECTOR SHIFT AND ROUND DECIMAL
 7 *           E65B VPSOP  - VECTOR PERFORM SIGN OPERATION DECIMAL
 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-g vector
18 *  shift and round decimal, and perform sign operation decimal
19 *  instructions. Exceptions are not tested.
20 *
21 *  PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
22 *  obvious coding errors.  None of the tests are thorough.  They are
23 *  NOT designed to test all aspects of any of the instructions.
24 *
25 ***************************************************************************
26 *
27 *     *Testcase zvector-e6-16-VSRP-VPSOP: VECTOR E6 VRI-g instructions
28 *     *
29 *     *    Zvector E6 tests for VRI-g encoded instruction:
30 *     *
31 *     *    E659 VSRP   - VECTOR SHIFT AND ROUND DECIMAL
32 *     *    E65B VPSOP  - VECTOR PERFORM SIGN OPERATION DECIMAL
33 *     *
34 *     *    # --------------------------------------------------------------
35 *     *    #  This tests only the basic function of the instruction.
36 *     *    #  Exceptions are NOT tested.
37 *     *    # --------------------------------------------------------------
38 *     *
39 *     mainsize    2
40 *     numcpu      1
41 *     sysclear
42 *     archlvl     z/Arch
43 *
44 *     diag8cmd    enable    # (needed for messages to Hercules console)
45 *     loadcore    "$(testpath)/zvector-e6-16-VSRP-VPSOP.core" 0x0
46 *     diag8cmd    disable   # (reset back to default)
47 *
48 *     *Done
49 *
50 ***************************************************************************
```

```
   LOC        OBJECT CODE      ADDR1     ADDR2    STMT

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

```
  LOC       OBJECT CODE      ADDR1     ADDR2     STMT

                                                 107 **********************************************************************
                                                 108 *          Low core PSWs
                                                 109 **********************************************************************

                             00000000  00003A6F  111 ZVE6TST  START 0
 00000000                    00000000            112          USING ZVE6TST,R0              Low core addressability
                                                 113
                             00000140  00000000  114 SVOLDPSW EQU   ZVE6TST+X'140'           z/Arch Supervisor call old PSW

 00000000                    00000000  000001A0  116          ORG   ZVE6TST+X'1A0'           z/Architecure RESTART PSW
 000001A0    00000001 80000000                   117          DC    X'0000000180000000'
 000001A8    00000000 00000200                   118          DC    AD(BEGIN)

 000001B0                    000001B0  000001D0  120          ORG   ZVE6TST+X'1D0'           z/Architecure PROGRAM CHECK PSW
 000001D0    00020001 80000000                   121          DC    X'0002000180000000'
 000001D8    00000000 0000DEAD                   122          DC    AD(X'DEAD')

 000001E0                    000001E0  00000200  124          ORG   ZVE6TST+X'200'           Start of actual test program...
                                                 125
```

```
   LOC        OBJECT CODE     ADDR1     ADDR2    STMT

                                                 127 ***********************************************************************
                                                 128 *          The actual "ZVE6TST" program itself...
                                                 129 ***********************************************************************
                                                 130 *
                                                 131 *   Architecture Mode: z/Arch
                                                 132 *   Register Usage:
                                                 133 *
                                                 134 *    R0          (work)
                                                 135 *    R1-4        (work)
                                                 136 *    R5          Testing control table - current test base
                                                 137 *    R6-R7       (work)
                                                 138 *    R8          First base register
                                                 139 *    R9          Second base register
                                                 140 *    R10         Third base register
                                                 141 *    R11         E6TEST call return
                                                 142 *    R12         E6TESTS register
                                                 143 *    R13         (work)
                                                 144 *    R14         Subroutine call
                                                 145 *    R15         Secondary Subroutine call or work
                                                 146 *
                                                 147 ***********************************************************************
00000200                        00000200         149         USING  BEGIN, R8           FIRST Base Register
00000200                        00001200         150         USING  BEGIN+4096, R9      SECOND Base Register
00000200                        00002200         151         USING  BEGIN+8192, R10     THIRD Base Register
                                                 152
00000200   0580                                  153 BEGIN   BALR   R8, 0               Initalize FIRST base register
00000202   0680                                  154         BCTR   R8, 0               Initalize FIRST base register
00000204   0680                                  155         BCTR   R8, 0               Initalize FIRST base register
                                                 156
00000206   4190 8800              00000800       157         LA     R9, 2048(, R8)      Initalize SECOND base register
0000020A   4190 9800              00000800       158         LA     R9, 2048(, R9)      Initalize SECOND base register
                                                 159
0000020E   41A0 9800              00000800       160         LA     R10, 2048(, R9)     Initalize THIRD base register
00000212   41A0 A800              00000800       161         LA     R10, 2048(, R10)    Initalize THIRD base register
                                                 162
00000216   B600 837C              0000057C       163         STCTL  R0, R0, CTLR0       Store CR0 to enable AFP
0000021A   9604 837D              0000057D       164         OI     CTLR0+1, X'04'      Turn on AFP bit
0000021E   9602 837D              0000057D       165         OI     CTLR0+1, X'02'      Turn on Vector bit
00000222   B700 837C              0000057C       166         LCTL   R0, R0, CTLR0       Reload updated CR0
                                                 167
                                                 168 ***********************************************************************
                                                 169 * Is Vector packed-decimal facility installed  (bit 134)
                                                 170 ***********************************************************************
                                                 171
                                                 172         FCHECK 134, 'vector-packed-decimal'
00000226   47F0 80B0              000002B0       173+        B      X0001
                                                 174+*                                         Fcheck data area
                                                 175+*                                         skip messgae
0000022A   40404040 40404040                     176+SKT0001 DC     C'          Skipping tests: '
00000244   A58583A3 96996097                     177+        DC     C'vector-packed-decimal'
00000259   40868183 899389A3                     178+        DC     C' facility (bit 134) is not installed.'
                             00000054  00000001  179+SKL0001 EQU    *-SKT0001
                                                 180+*                                         facility bits
00000280   00000000 00000000                     181+        DS     FD                         gap
00000288   00000000 00000000                     182+FB0001  DS     4FD
```

```
  LOC          OBJECT CODE     ADDR1     ADDR2     STMT

000002A8  00000000 00000000                        183+        DS     FD                         gap
                                                   184+*
                              000002B0  00000001   185+X0001   EQU    *
000002B0  4100 0004                      00000004   186+        LA     R0,((X0001-FB0001)/8)-1
000002B4  B2B0 8088                      00000288   187+        STFLE  FB0001                     get facility bits
000002B8  B982 0000                                 188+        XGR    R0,R0
000002BC  4300 8098                      00000298   189+        IC     R0,FB0001+16               get fbit byte
000002C0  5400 8384                      00000584   190+        N      R0,=F'2'                   is bit set?
000002C4  4770 80D8                      000002D8   191+        BNZ    XC0001
                                                   192+*
                                                   193+* facility bit not set, issue message and exit
                                                   194+*
000002C8  4100 0054                      00000054   195+        LA     R0,SKL0001                 message length
000002CC  4110 802A                      0000022A   196+        LA     R1,SKT0001                 message address
000002D0  4520 8298                      00000498   197+        BAL    R2,MSG
000002D4  47F0 8360                      00000560   198+        B      EOJ
                              000002D8  00000001   199+XC0001   EQU    *
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2    STMT

                                                 201 ****************************************************************************
                                                 202 *              Do tests in the E6TESTS table
                                                 203 ****************************************************************************
                                                 204
000002D8  58C0 8388                    00000588  205          L     R12,=A(E6TESTS)       get table of test addressess
                                                 206
                             000002DC   00000001  207 NEXTE6  EQU   *
000002DC  5850 C000                    00000000  208          L     R5,0(0,R12)           get test address
000002E0  1255                                   209          LTR   R5,R5                  have a test?
000002E2  4780 824E                    0000044E  210          BZ    ENDTEST                  done?
                                                 211
000002E6  B982 0000                              212          XGR   R0,R0                 no cc error
                                                 213
000002EA              00000000                   214          USING E6TEST,R5
                                                 215
000002EA  4800 5004                    00000004  216          LH    R0,TNUM               save current test number
000002EE  5000 8E04                    00001004  217          ST    R0,TESTING            for easy reference
                                                 218
000002F2  E710 8F30 0006               00001130  219          VL    V1,V1FUDGE
000002F8  58B0 5000                    00000000  220          L     R11,TSUB              get address of test routine
000002FC  05BB                                   221          BALR  R11,R11               do test
                                                 222
000002FE  E310 500B 0076               0000000B  223          LB    R1,CCMASK             (failure CC mask)
00000304  8910 0004                    00000004  224          SLL   R1,4                  (shift to BC instr CC position)
00000308  4410 8124                    00000324  225          EX    R1,TESTCC               fail if...
                                                 226
                             0000030C   00000001  227 TESTREST EQU   *
0000030C  E310 501C 0014               0000001C  228          LGF   R1,READDR             get address of expected result
00000312  D50F 8F10 1000     00001110  00000000  229          CLC   V1OUTPUT,0(R1)        valid?
00000318  4770 81B8                    000003B8  230          BNE   FAILMSG                 no, issue failed message
                                                 231
0000031C  41C0 C004                    00000004  232          LA    R12,4(0,R12)          next test address
00000320  47F0 80DC                    000002DC  233          B     NEXTE6
                                                 234
00000324  4700 8128                    00000328  235 TESTCC  BC    0,CCMSG               (fail if unexpected condition code)
```

```
  LOC         OBJECT CODE    ADDR1     ADDR2     STMT

                                                 237 *****************************************************************************
                                                 238 * cc was not as expected
                                                 239 *****************************************************************************
                             00000328  00000001  240 CCMSG    EQU     *
00000328  E310 0001 0082                00000001  241          XG      R1,R1
0000032E  E310 5009 0076                00000009  242          LB      R1,M5           M5 has CS bit
00000334  5410 838C                     0000058C  243          N       R1,=F'1'        get CS (CC set) bit
00000338  4780 810C                     0000030C  244          BZ      TESTREST           ignore if not set
                                                 245 *
                                                 246 * extract CC extracted PSW
                                                 247 *
0000033C  5810 8EF4                     000010F4  248          L       R1,CCPSW
00000340  8810 000C                     0000000C  249          SRL     R1,12
00000344  5410 8390                     00000590  250          N       R1,=XL4'3'
00000348  4210 8EFC                     000010FC  251          STC     R1,CCFOUND      save cc
                                                 252 *
                                                 253 * FILL IN MESSAGE
                                                 254 *
0000034C  4820 5004                     00000004  255          LH      R2,TNUM              get test number and convert
00000350  4E20 8EE2                     000010E2  256          CVD     R2,DECNUM
00000354  D211 8ECC 8EB6     000010CC   000010B6  257          MVC     PRT3,EDIT
0000035A  DE11 8ECC 8EE2     000010CC   000010E2  258          ED      PRT3,DECNUM
00000360  D202 8E71 8ED9     00001071   000010D9  259          MVC     CCPRTNUM(3),PRT3+13  fill in message with test #
                                                 260
00000366  D207 8E8E 5010     0000108E   00000010  261          MVC     CCPRTNAME,OPNAME     fill in message with instruction
                                                 262
0000036C  B982 0022                               263          XGR     R2,R2                get CC as U8
00000370  4320 500A                     0000000A  264          IC      R2,CC
00000374  4E20 8EE2                     000010E2  265          CVD     R2,DECNUM            and convert
00000378  D211 8ECC 8EB6     000010CC   000010B6  266          MVC     PRT3,EDIT
0000037E  DE11 8ECC 8EE2     000010CC   000010E2  267          ED      PRT3,DECNUM
00000384  D200 8EA4 8EDB     000010A4   000010DB  268          MVC     CCPRTEXP(1),PRT3+15  fill in message with CC field
                                                 269
0000038A  B982 0022                               270          XGR     R2,R2                get CCFOUND as U8
0000038E  4320 8EFC                     000010FC  271          IC      R2,CCFOUND
00000392  4E20 8EE2                     000010E2  272          CVD     R2,DECNUM            and convert
00000396  D211 8ECC 8EB6     000010CC   000010B6  273          MVC     PRT3,EDIT
0000039C  DE11 8ECC 8EE2     000010CC   000010E2  274          ED      PRT3,DECNUM
000003A2  D200 8EB4 8EDB     000010B4   000010DB  275          MVC     CCPRTGOT(1),PRT3+15  fill in message with ccfound
                                                 276
000003A8  4100 0055                     00000055  277          LA      R0,CCPRTLNG          message length
000003AC  4110 8E61                     00001061  278          LA      R1,CCPRTLINE         messagfe address
000003B0  45F0 825C                     0000045C  279          BAL     R15,RPTERROR
                                                 280
000003B4  47F0 823E                     0000043E  281          B       FAILCONT
```

```
  LOC         OBJECT CODE      ADDR1     ADDR2     STMT

                                                    283 ****************************************************************************
                                                    284 * result not as expected:
                                                    285 *       issue message with test number, instruction under test
                                                    286 *              and instruction m3
                                                    287 ****************************************************************************
                              000003B8    00000001  288 FAILMSG  EQU    *
000003B8   4820 5004                      00000004  289          LH     R2,TNUM             get test number and convert
000003BC   4E20 8EE2                      000010E2  290          CVD    R2,DECNUM
000003C0   D211 8ECC 8EB6     000010CC    000010B6  291          MVC    PRT3,EDIT
000003C6   DE11 8ECC 8EE2     000010CC    000010E2  292          ED     PRT3,DECNUM
000003CC   D202 8E18 8ED9     00001018    000010D9  293          MVC    PRTNUM(3),PRT3+13   fill in message with test #
                                                    294
000003D2   D207 8E33 5010     00001033    00000010  295          MVC    PRTNAME,OPNAME      fill in message with instruction
                                                    296
000003D8   B982 0022                                297          XGR    R2,R2               get i3 as U8
000003DC   4320 5007                      00000007  298          IC     R2,I3
000003E0   4E20 8EE2                      000010E2  299          CVD    R2,DECNUM           and convert
000003E4   D211 8ECC 8EB6     000010CC    000010B6  300          MVC    PRT3,EDIT
000003EA   DE11 8ECC 8EE2     000010CC    000010E2  301          ED     PRT3,DECNUM
000003F0   D202 8E44 8ED9     00001044    000010D9  302          MVC    PRTI3(3),PRT3+13    fill in message with i3 field
                                                    303
000003F6   B982 0022                                304          XGR    R2,R2               get i4 as U8
000003FA   4320 5008                      00000008  305          IC     R2,I4
000003FE   4E20 8EE2                      000010E2  306          CVD    R2,DECNUM           and convert
00000402   D211 8ECC 8EB6     000010CC    000010B6  307          MVC    PRT3,EDIT
00000408   DE11 8ECC 8EE2     000010CC    000010E2  308          ED     PRT3,DECNUM
0000040E   D202 8E51 8ED9     00001051    000010D9  309          MVC    PRTI4(3),PRT3+13    fill in message with i4 field
                                                    310
00000414   B982 0022                                311          XGR    R2,R2               get m5 as U8
00000418   4320 5009                      00000009  312          IC     R2,M5               and convert
0000041C   4E20 8EE2                      000010E2  313          CVD    R2,DECNUM
00000420   D211 8ECC 8EB6     000010CC    000010B6  314          MVC    PRT3,EDIT
00000426   DE11 8ECC 8EE2     000010CC    000010E2  315          ED     PRT3,DECNUM
0000042C   D201 8E5E 8EDA     0000105E    000010DA  316          MVC    PRTM5(2),PRT3+14    fill in message with m5 field
                                                    317
00000432   4100 0059                      00000059  318          LA     R0,PRTLNG           message length
00000436   4110 8E08                      00001008  319          LA     R1,PRTLINE          messagfe address
0000043A   45F0 825C                      0000045C  320          BAL    R15,RPTERROR


                                                    322 ****************************************************************************
                                                    323 * continue after a failed test
                                                    324 ****************************************************************************
                              0000043E    00000001  325 FAILCONT EQU    *
0000043E   5800 838C                      0000058C  326          L      R0,=F'1'            set GLOBAL failed test indicator
00000442   5000 8E00                      00001000  327          ST     R0,FAILED
                                                    328
00000446   41C0 C004                      00000004  329          LA     R12,4(0,R12)        next test address
0000044A   47F0 80DC                      000002DC  330          B      NEXTE6


                                                    332 ****************************************************************************
                                                    333 * end of testing; set ending psw
                                                    334 ****************************************************************************
                              0000044E    00000001  335 ENDTEST  EQU    *
0000044E   5810 8E00                      00001000  336          L      R1,FAILED           did a test fail?
```

```
   LOC        OBJECT CODE      ADDR1     ADDR2    STMT

00000452  1211                                   337       LTR   R1,R1
00000454  4780 8360                    00000560   338       BZ    EOJ             No, exit
00000458  47F0 8378                    00000578   339       B     FAILTEST        Yes, exit with BAD PSW
                                                  340
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2    STMT

                                                 342 *********************************************************************
                                                 343 *          RPTERROR           Report instruction test in error
                                                 344 *                                 R0 = MESSGAE LENGTH
                                                 345 *                                 R1 = ADDRESS OF MESSAGE
                                                 346 *********************************************************************

0000045C   50F0 827C                   0000047C  348 RPTERROR ST    R15,RPTSAVE          Save return address
00000460   5050 8280                   00000480  349          ST    R5,RPTSVR5           Save R5
                                                 350 *
                                                 351 *          Use Hercules Diagnose for Message to console
                                                 352 *
00000464   9002 8288                   00000488  353          STM   R0,R2,RPTDWSAV       save regs used by MSG
00000468   4520 8298                   00000498  354          BAL   R2,MSG               call Hercules console MSG display
0000046C   9802 8288                   00000488  355          LM    R0,R2,RPTDWSAV       restore regs

00000470   5850 8280                   00000480  357          L     R5,RPTSVR5           Restore R5
00000474   58F0 827C                   0000047C  358          L     R15,RPTSAVE          Restore return address
00000478   07FF                                  359          BR    R15                  Return to caller

0000047C   00000000                              361 RPTSAVE  DC    F'0'                 R15 save area
00000480   00000000                              362 RPTSVR5  DC    F'0'                 R5 save area

00000488   00000000 00000000                     364 RPTDWSAV DC    2D'0'                R0-R2 save area for MSG call
```

```
 LOC          OBJECT CODE      ADDR1     ADDR2     STMT

                                                  366 *******************************************************************************
                                                  367 *          Issue HERCULES MESSAGE pointed to by R1, length in R0
                                                  368 *               R2 = return address
                                                  369 *******************************************************************************
                                                  370
00000498  4900 8394                     00000594  371 MSG     CH    R0,=H'0'              Do we even HAVE a message?
0000049C  07D2                                    372         BNHR  R2                    No, ignore
                                                  373
0000049E  9002 82D4                     000004D4  374         STM   R0,R2,MSGSAVE         Save registers
                                                  375
000004A2  4900 8396                     00000596  376         CH    R0,=AL2(L'MSGMSG)     Message length within limits?
000004A6  47D0 82AE                     000004AE  377         BNH   MSGOK                 Yes, continue
000004AA  4100 005F                     0000005F  378         LA    R0,L'MSGMSG           No, set to maximum
                                                  379
000004AE  1820                                    380 MSGOK   LR    R2,R0                 Copy length to work register
000004B0  0620                                    381         BCTR  R2,0                  Minus-1 for execute
000004B2  4420 82E0                     000004E0  382         EX    R2,MSGMVC             Copy message to O/P buffer
                                                  383
000004B6  4120 200A                     0000000A  384         LA    R2,1+L'MSGCMD(,R2)    Calculate true command length
000004BA  4110 82E6                     000004E6  385         LA    R1,MSGCMD             Point to true command
                                                  386
000004BE  83120008                                387         DC    X'83',X'12',X'0008'   Issue Hercules Diagnose X'008'
000004C2  4780 82CE                     000004CE  388         BZ    MSGRET                Return if successful
                                                  389
000004C6  1222                                    390         LTR   R2,R2                 Is Diag8 Ry (R2) 0?
000004C8  4780 82CE                     000004CE  391         BZ    MSGRET                 an error occurred but coninue
                                                  392
000004CC  0000                                    393         DC    H'0'                  CRASH for debugging purposes
                                                  394
000004CE  9802 82D4                     000004D4  395 MSGRET  LM    R0,R2,MSGSAVE         Restore registers
000004D2  07F2                                    396         BR    R2                    Return to caller


000004D4  00000000 00000000                       398 MSGSAVE DC    3F'0'                 Registers save area
000004E0  D200 82EF 1000      000004EF  00000000  399 MSGMVC  MVC   MSGMSG(0),0(R1)       Executed instruction

000004E6  D4E2C7D5 D6C8405C                        401 MSGCMD  DC    C'MSGNOH * '          *** HERCULES MESSAGE COMMAND ***
000004EF  40404040 40404040                        402 MSGMSG  DC    CL95' '              The message text to be displayed
                                                  403
```

```
  LOC         OBJECT CODE      ADDR1     ADDR2    STMT

                                                  405 ***********************************************************************
                                                  406 *          Normal completion or Abnormal termination PSWs
                                                  407 ***********************************************************************


00000550   00020001 80000000                      409 EOJPSW   DC    0D'0',X'0002000180000000',AD(0)

00000560   B2B2 8350                    00000550   411 EOJ      LPSWE EOJPSW              Normal completion


00000568   00020001 80000000                      413 FAILPSW  DC    0D'0',X'0002000180000000',AD(X'BAD')

00000578   B2B2 8368                    00000568   415 FAILTEST LPSWE FAILPSW             Abnormal termination



                                                  417 ***********************************************************************
                                                  418 *          Working Storage
                                                  419 ***********************************************************************


0000057C   00000000                               421 CTLR0    DS    F                   CR0
00000580   00000000                               422          DS    F


00000584                                          424          LTORG ,                   Literals pool
00000584   00000002                               425                =F'2'
00000588   000038DC                               426                =A(E6TESTS)
0000058C   00000001                               427                =F'1'
00000590   00000003                               428                =XL4'3'
00000594   0000                                   429                =H'0'
00000596   005F                                   430                =AL2(L'MSGMSG)
                                                  431
                                                  432 *        some constants
                                                  433
                              00000400  00000001   434 K        EQU   1024                One KB
                              00001000  00000001   435 PAGE     EQU   (4*K)               Size of one page
                              00010000  00000001   436 K64      EQU   (64*K)              64 KB
                              00100000  00000001   437 MB       EQU   (K*K)               1 MB
                                                  438
                              AABBCCDD  00000001   439 REG2PATT EQU   X'AABBCCDD'          Polluted Register pattern
                              000000DD  00000001   440 REG2LOW  EQU         X'DD'          (last byte above)
```

```
  LOC          OBJECT CODE      ADDR1      ADDR2      STMT

                                                      442 *=========================================================================
                                                      443 *
                                                      444 *    NOTE: start data on an address that is easy to display
                                                      445 *          within Hercules
                                                      446 *
                                                      447 *=========================================================================
                                                      448
00000598                        00000598   00001000   449           ORG      ZVE6TST+X'1000'
00001000   00000000                                   450 FAILED    DC       F'0'                          some test failed?
00001004   00000000                                   451 TESTING   DC       F'0'                          current test number


                                                      453 ***********************************************************************
                                                      454 *          TEST failed : result messgae
                                                      455 ***********************************************************************
                                                      456 *
                                                      457 *          failed message and associated editting
                                                      458 *
00001008   40404040 40404040                          459 PRTLINE   DC       C'          Test # '
00001018   A7A7A7                                     460 PRTNUM    DC       C'xxx'
0000101B   40868189 93858440                          461           DC       C' failed for instruction '
00001033   A7A7A7A7 A7A7A7A7                           462 PRTNAME   DC       CL8'xxxxxxxx'
0000103B   40A689A3 884089F3                          463           DC       C' with i3='
00001044   A7A7A7                                     464 PRTI3     DC       C'xxx'
00001047   6B                                         465           DC       C','
00001048   40A689A3 884089F4                          466           DC       C' with i4='
00001051   A7A7A7                                     467 PRTI4     DC       C'xxx'
00001054   6B                                         468           DC       C','
00001055   40A689A3 884094F5                          469           DC       C' with m5='
0000105E   A7A7                                       470 PRTM5     DC       C'xx'
00001060   4B                                         471           DC       C'.'
                                00000059   00000001   472 PRTLNG    EQU      *-PRTLINE


                                                      474 ***********************************************************************
                                                      475 *          TEST failed : CC message
                                                      476 ***********************************************************************
                                                      477 *
                                                      478 *          failed message and associated editting
                                                      479 *
00001061   40404040 40404040                          480 CCPRTLINE DC       C'          Test # '
00001071   A7A7A7                                     481 CCPRTNUM  DC       C'xxx'
00001074   40A69996 95874083                          482           DC       c' wrong cc for instruction '
0000108E   A7A7A7A7 A7A7A7A7                           483 CCPRTNAME DC        CL8'xxxxxxxx'
00001096   4085A797 8583A385                          484           DC       C' expected: cc='
000010A4   A7                                         485 CCPRTEXP  DC       C'x'
000010A5   6B                                         486           DC       C','
000010A6   40998583 8589A585                          487           DC       C' received: cc='
000010B4   A7                                         488 CCPRTGOT  DC       C'x'
000010B5   4B                                         489           DC       C'.'
                                00000055   00000001   490 CCPRTLNG   EQU      *-CCPRTLINE
```

```
 LOC          OBJECT CODE        ADDR1     ADDR2     STMT

                                                     492 ***********************************************************************
                                                     493 *          TEST failed : message working storge
                                                     494 ***********************************************************************
000010B6   40212020 20202020                         495 EDIT     DC     XL18'402120202020202020202020202020202020'
                                                     496
000010C8   7E7E7E6E                                  497          DC     C' ===>'
000010CC   40404040 40404040                         498 PRT3     DC     CL18' '
000010DE   4C7E7E7E                                  499          DC     C' <==='
000010E2   00000000 00000000                         500 DECNUM   DS     CL16
                                                     501 *
                                                     502 *          CC extrtaction
                                                     503 *
000010F4   00000000 00000000                         504 CCPSW    DS     2F             extract PSW after test (has CC)
000010FC   00                                        505 CCFOUND  DS     X              extracted cc


                                                     507 ***********************************************************************
                                                     508 *          Vector instruction results, pollution and input
                                                     509 ***********************************************************************
00001100                                             510          DS     0FD
00001100   00000000 00000000                         511          DS     XL16                                             gap
00001110   00000000 00000000                         512 V10UTPUT DS     XL16                                        V1 OUTPUT
00001120   00000000 00000000                         513          DS     XL16                                             gap
00001130   FFFFFFFF FFFFFFFF                         514 V1FUDGE  DC     XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'       V1 FUDGE
00001140   F1F2F3F4 F5F6F7F8                         515 V1INPUT  DC     CL16'1234567890123456'                      V1 input
00001150   F7F8F9F0 F1F2F3F4                         516          DC     CL14'78901234567890'
0000115E   D9                                        517          DC     X'D9'
0000115F   00000000 00000000                         518          DS     XL16                                             gap
```

```
  LOC          OBJECT CODE        ADDR1     ADDR2     STMT

                                            520 ************************************************************************
                                            521 *          E6TEST DSECT
                                            522 ************************************************************************

                                            524 E6TEST    DSECT ,
00000000   00000000                         525 TSUB      DC    A(0)               pointer  to test
00000004   0000                             526 TNUM      DC    H'00'              Test Number
00000006   00                               527           DC    X'00'
00000007   00                               528 I3        DC    HL1'00'            i3 used
00000008   00                               529 I4        DC    HL1'00'            i4 used
00000009   00                               530 M5        DC    HL1'00'            m5 used
0000000A   00                               531 CC        DC    HL1'00'            cc
0000000B   00                               532 CCMASK    DC    HL1'00'            not expected CC mask
                                            533
0000000C   00000000                         534 V2VALUE   DC    A(0)
                                            535
00000010   40404040 40404040               536 OPNAME    DC    CL8' '             E6 name
                                            537
00000018   00000000                         538 RELEN     DC    A(0)               RESULT LENGTH
0000001C   00000000                         539 READDR    DC    A(0)               expected result address
                                            540
                                            541 *          EXPECTED RESULT
                                            542 **
                                            543 *          test routine will be here (from VRI_G macro)
```

```
  LOC          OBJECT CODE       ADDR1     ADDR2    STMT

                                                   545 *****************************************************************************
                                                   546 *      Macros to help build test tables
                                                   547 *---------------------------------------------------------------------------
                                                   548 *      VRI_G Macro to help build test tables
                                                   549 *****************************************************************************
                                                   550          MACRO
                                                   551          VRI_G &INST,&I3,&I4,&M5,&CC
                                                   552 .*                                      &INST  - VRI-g instruction under test
                                                   553 .*                                      &i3    - i3 field
                                                   554 .*                                      &i4    - i4 field
                                                   555 .*                                      &m5    - m5 field
                                                   556 .*                                      &CC    - expected CC
                                                   557 .*
                                                   558          LCLA  &XCC(4)   &CC has mask values for FAILED condition codes
                                                   559 &XCC(1)  SETA  7             CC != 0
                                                   560 &XCC(2)  SETA  11            CC != 1
                                                   561 &XCC(3)  SETA  13            CC != 2
                                                   562 &XCC(4)  SETA  14            CC != 3
                                                   563 .*
                                                   564          GBLA  &TNUM
                                                   565 &TNUM    SETA  &TNUM+1
                                                   566
                                                   567          DS    0FD
                                                   568          USING *,R5                 base for test data and test routine
                                                   569
                                                   570 T&TNUM   DC    A(X&TNUM)            address of test routine
                                                   571          DC    H'&TNUM'             test number
                                                   572          DC    X'00'
                                                   573          DC    HL1'&I3'             i3
                                                   574          DC    HL1'&I4'             i4
                                                   575          DC    HL1'&M5'             m5
                                                   576          DC    HL1'&CC'             cc
                                                   577          DC    HL1'&XCC(&CC+1)'     cc failed mask
                                                   578 V2_&TNUM DC    A(RE&TNUM+16)        address of v2: 16-byte packed decimal
                                                   579          DC    CL8'&INST'           instruction name
                                                   580          DC    A(16)                result length
                                                   581 REA&TNUM DC    A(RE&TNUM)           result address
                                                   582 .*
                                                   583 *                                   INSTRUCTION UNDER TEST ROUTINE
                                                   584
                                                   585 X&TNUM   DS    0F
                                                   586          LGF   R2,V2_&TNUM          get v2
                                                   587          VL    V2,0(R2)
                                                   588
                                                   589          &INST V1,V2,&I3,&I4,&M5  test instruction
                                                   590
                                                   591          VST   V1,V1OUTPUT          save result
                                                   592          EPSW  R2,R0                exptract psw
                                                   593          ST    R2,CCPSW                to save CC
                                                   594          BR    R11                  return
                                                   595
                                                   596 RE&TNUM  DC    0F
                                                   597          DROP  R5
                                                   598
                                                   599          MEND
```

```
 LOC        OBJECT CODE       ADDR1     ADDR2    STMT

                                                 601 **********************************************************************
                                                 602 *       PTTABLE Macro to generate table of pointers to individual tests
                                                 603 **********************************************************************
                                                 604
                                                 605           MACRO
                                                 606           PTTABLE
                                                 607           GBLA   &TNUM
                                                 608           LCLA   &CUR
                                                 609 &CUR      SETA   1
                                                 610 .*
                                                 611 TTABLE    DS     0F
                                                 612 .LOOP     ANOP
                                                 613 .*
                                                 614           DC     A(T&CUR)          address of test
                                                 615 .*
                                                 616 &CUR      SETA   &CUR+1
                                                 617           AIF    (&CUR LE &TNUM).LOOP
                                                 618 *
                                                 619           DC     A(0)              END OF TABLE
                                                 620           DC     A(0)
                                                 621 .*
                                                 622           MEND
```

```
     LOC        OBJECT CODE      ADDR1     ADDR2    STMT

                                                    624 ******************************************************************************
                                                    625 *         E6 VRI_G tests
                                                    626 ******************************************************************************
                                                    627
                            00000000  00003A6F      628 ZVE6TST  CSECT ,
00001170                                            629           DS    0F

                                                    631           PRINT DATA
                                                    632 *
                                                    633 *         E659 VSRP   - VECTOR SHIFT AND ROUND DECIMAL
                                                    634 *         E65B VPSOP  - VECTOR PERFORM SIGN OPERATION DECIMAL
                                                    635 *
                                                    636 *         VRI_G instr,i3,i4,m5,cc
                                                    637 *             followed by
                                                    638 *             v1 - 16 byte expected result
                                                    639 *             v2 - 16 byte zoned decimal (operand)
                                                    640
                                                    641 *-----------------------------------------------------------------------
                                                    642 * VSRP  - VECTOR SHIFT AND ROUND DECIMAL REGISTER
                                                    643 *-----------------------------------------------------------------------
                                                    644 * VSRP with some I3, I4 and M5's
                                                    645 * I3 tests
                                                    646 *                         i4=129 (iom=1, rdc=1)
                                                    647 *                         i4=132 (iom=1, rdc=4)
                                                    648 *                         i4=135 (iom=1, rdc=7)
                                                    649 *                         i4=142 (iom=1, rdc=14)
                                                    650 *                         i4=159 (iom=1, rdc=31)
                                                    651 * I4
                                                    652 *                         i4=  0 (drd=0, shamt=0)   shift left
                                                    653 *                         i4=  1 (drd=0, shamt=1)   shift left
                                                    654 *                         i4=  4 (drd=0, shamt=4)   shift left
                                                    655 *                         i4=  7 (drd=0, shamt=7)   shift left
                                                    656 *                         i4= 14 (drd=0, shamt=14)  shift left
                                                    657 *                         i4= 30 (drd=0, shamt=30)  shift left
                                                    658 *                         i4= 31 (drd=0, shamt=31)  shift left
                                                    659
                                                    660 *                         i4=96  (drd=0, shamt=-32) shift right
                                                    661 *                         i4=114 (drd=0, shamt=-14) shift right
                                                    662 *                         i4=121 (drd=0, shamt=-7)  shift right
                                                    663 *                         i4=124 (drd=0, shamt=-4)  shift right
                                                    664 *                         i4=127 (drd=0, shamt=-1)  shift right
                                                    665
                                                    666 *                         i4=129 (drd=1, shamt=1)   shift left
                                                    667 *                         i4=132 (drd=1, shamt=4)   shift left
                                                    668 *                         i4=135 (drd=1, shamt=7)   shift left
                                                    669 *                         i4=142 (drd=1, shamt=14)  shift left
                                                    670 *                         i4=159 (drd=1, shamt=31)  shift left
                                                    671
                                                    672 *                         i4=224 (drd=1, shamt=-32) shift right
                                                    673 *                         i4=225 (drd=1, shamt=-31) shift right
                                                    674 *                         i4=242 (drd=1, shamt=-14) shift right
                                                    675 *                         i4=249 (drd=1, shamt=-7)  shift right
                                                    676 *                         i4=252 (drd=1, shamt=-4)  shift right
                                                    677 *                         i4=255 (drd=1, shamt=-1)  shift right
                                                    678
```

```
  LOC          OBJECT CODE      ADDR1     ADDR2    STMT

                                                   679 *
                                                   680 * m5 tests (note: cs is always 1)
                                                   681 *                                        m5=1   (p2=0,  p1=0,  cs=1)
                                                   682 *                                        m5=3   (p2=0,  p1=1,  cs=1)
                                                   683 *                                        m5=9   (p2=1,  p1=0,  cs=1)
                                                   684 *                                        m5=11 (p2=1,  p1=1,  cs=1)
                                                   685
                                                   686          VRI_G VSRP, 159, 0, 1, 2             shamt=0
00001170                                           687+         DS    0FD
00001170                               00001170    688+         USING *, R5                      base for test data and test routine
00001170  00001190                                 689+T1       DC    A(X1)                       address of test routine
00001174  0001                                     690+         DC    H'1'                        test number
00001176  00                                       691+         DC    X'00'
00001177  9F                                        692+         DC    HL1'159'                    i3
00001178  00                                       693+         DC    HL1'0'                      i4
00001179  01                                       694+         DC    HL1'1'                      m5
0000117A  02                                       695+         DC    HL1'2'                      cc
0000117B  0D                                       696+         DC    HL1'13'                     cc failed mask
0000117C  000011C4                                 697+V2_1     DC    A(RE1+16)                   address of v2: 16-byte packed decimal
00001180  E5E2D9D7 40404040                        698+         DC    CL8'VSRP'                   instruction name
00001188  00000010                                 699+         DC    A(16)                       result length
0000118C  000011B4                                 700+REA1     DC    A(RE1)                      result address
                                                   701+*                                        INSTRUCTION UNDER TEST ROUTINE
00001190                                           702+X1       DS    0F
00001190  E320 500C 0014               0000117C    703+         LGF   R2, V2_1                    get v2
00001196  E722 0000 0006               00000000    704+         VL    V2, 0(R2)
0000119C  E612 0019 F059                           705+         VSRP  V1, V2, 159, 0, 1            test instruction
000011A2  E710 8F10 000E               00001110    706+         VST   V1, V1OUTPUT                save result
000011A8  B98D 0020                                707+         EPSW  R2, R0                      exptract psw
000011AC  5020 8EF4                    000010F4    708+         ST    R2, CCPSW                       to save CC
000011B0  07FB                                     709+         BR    R11                         return
000011B4                                           710+RE1      DC    0F
000011B4                                           711+         DROP  R5
000011B4  00000000 00000000                        712          DC    XL16'00000000000000000000000000000022C'      V1
000011BC  00000000 0000022C
000011C4  00000000 00000000                        713          DC    XL16'00000000000000000000000000000022C'      V2
000011CC  00000000 0000022C

                                                   714
                                                   715          VRI_G VSRP, 159, 1, 1, 2             shamt=1 (left)
000011D8                                           716+         DS    0FD
000011D8                               000011D8    717+         USING *, R5                      base for test data and test routine
000011D8  000011F8                                 718+T2       DC    A(X2)                       address of test routine
000011DC  0002                                     719+         DC    H'2'                        test number
000011DE  00                                       720+         DC    X'00'
000011DF  9F                                        721+         DC    HL1'159'                    i3
000011E0  01                                       722+         DC    HL1'1'                      i4
000011E1  01                                       723+         DC    HL1'1'                      m5
000011E2  02                                       724+         DC    HL1'2'                      cc
000011E3  0D                                       725+         DC    HL1'13'                     cc failed mask
000011E4  0000122C                                 726+V2_2     DC    A(RE2+16)                   address of v2: 16-byte packed decimal
000011E8  E5E2D9D7 40404040                        727+         DC    CL8'VSRP'                   instruction name
000011F0  00000010                                 728+         DC    A(16)                       result length
000011F4  0000121C                                 729+REA2     DC    A(RE2)                      result address
                                                   730+*                                        INSTRUCTION UNDER TEST ROUTINE
000011F8                                           731+X2       DS    0F
000011F8  E320 500C 0014               000011E4    732+         LGF   R2, V2_2                    get v2
```

```
  LOC          OBJECT CODE      ADDR1      ADDR2     STMT

000011FE  E722 0000 0006                 00000000    733+        VL      V2,0(R2)
00001204  E612 0119 F059                             734+        VSRP    V1,V2,159,1,1      test instruction
0000120A  E710 8F10 000E                 00001110    735+        VST     V1,V10UTPUT       save result
00001210  B98D 0020                                  736+        EPSW    R2,R0             exptract psw
00001214  5020 8EF4                      000010F4    737+        ST      R2,CCPSW                to save CC
00001218  07FB                                       738+        BR      R11               return
0000121C                                             739+RE2     DC      0F
0000121C                                             740+        DROP    R5
0000121C  00000000 00000000                          741         DC      XL16'000000000000000000000000000220C'      V1
00001224  00000000 0000220C
0000122C  00000000 00000000                          742         DC      XL16'000000000000000000000000000022C'      V2
00001234  00000000 0000022C

                                                     743
                                                     744         VRI_G VSRP,159,7,1,2                shamt=7 (left)
00001240                                             745+        DS      0FD
00001240                           00001240          746+        USING *,R5                base for test data and test routine
00001240  00001260                                   747+T3      DC      A(X3)             address of test routine
00001244  0003                                       748+        DC      H'3'              test number
00001246  00                                         749+        DC      X'00'
00001247  9F                                         750+        DC      HL1'159'          i3
00001248  07                                         751+        DC      HL1'7'            i4
00001249  01                                         752+        DC      HL1'1'            m5
0000124A  02                                         753+        DC      HL1'2'            cc
0000124B  0D                                         754+        DC      HL1'13'           cc failed mask
0000124C  00001294                                   755+V2_3    DC      A(RE3+16)         address of v2: 16-byte packed decimal
00001250  E5E2D9D7 40404040                          756+        DC      CL8'VSRP'         instruction name
00001258  00000010                                   757+        DC      A(16)             result length
0000125C  00001284                                   758+REA3    DC      A(RE3)            result address
                                                     759+*                                INSTRUCTION UNDER TEST ROUTINE
00001260                                             760+X3      DS      0F
00001260  E320 500C 0014                 0000124C    761+        LGF     R2,V2_3           get v2
00001266  E722 0000 0006                 00000000    762+        VL      V2,0(R2)
0000126C  E612 0719 F059                             763+        VSRP    V1,V2,159,7,1      test instruction
00001272  E710 8F10 000E                 00001110    764+        VST     V1,V10UTPUT       save result
00001278  B98D 0020                                  765+        EPSW    R2,R0             exptract psw
0000127C  5020 8EF4                      000010F4    766+        ST      R2,CCPSW                to save CC
00001280  07FB                                       767+        BR      R11               return
00001284                                             768+RE3     DC      0F
00001284                                             769+        DROP    R5
00001284  00000000 00000000                          770         DC      XL16'000000000000000000000000220000000C'      V1
0000128C  00000022 0000000C
00001294  00000000 00000000                          771         DC      XL16'000000000000000000000000000000022C'      V2
0000129C  00000000 0000022C

                                                     772
                                                     773         VRI_G VSRP,159,30,1,3                shamt=30 (left) (overflow)
000012A8                                             774+        DS      0FD
000012A8                           000012A8          775+        USING *,R5                base for test data and test routine
000012A8  000012C8                                   776+T4      DC      A(X4)             address of test routine
000012AC  0004                                       777+        DC      H'4'              test number
000012AE  00                                         778+        DC      X'00'
000012AF  9F                                         779+        DC      HL1'159'          i3
000012B0  1E                                         780+        DC      HL1'30'           i4
000012B1  01                                         781+        DC      HL1'1'            m5
000012B2  03                                         782+        DC      HL1'3'            cc
000012B3  0E                                         783+        DC      HL1'14'           cc failed mask
000012B4  000012FC                                   784+V2_4    DC      A(RE4+16)         address of v2: 16-byte packed decimal
```

```
   LOC         OBJECT CODE     ADDR1     ADDR2     STMT

000012B8  E5E2D9D7 40404040              785+        DC    CL8'VSRP'            instruction name
000012C0  00000010                       786+        DC    A(16)               result length
000012C4  000012EC                       787+REA4    DC    A(RE4)              result address
                                         788+*                                INSTRUCTION UNDER TEST ROUTINE
000012C8                                 789+X4      DS    0F
000012C8  E320 500C 0014        000012B4 790+        LGF   R2,V2_4             get v2
000012CE  E722 0000 0006        00000000 791+        VL    V2,0(R2)
000012D4  E612 1E19 F059                 792+        VSRP  V1,V2,159,30,1       test instruction
000012DA  E710 8F10 000E        00001110 793+        VST   V1,V10UTPUT         save result
000012E0  B98D 0020                      794+        EPSW  R2,R0               exptract psw
000012E4  5020 8EF4             000010F4 795+        ST    R2,CCPSW               to save CC
000012E8  07FB                           796+        BR    R11                 return
000012EC                                 797+RE4     DC    0F
000012EC                                 798+        DROP  R5
000012EC  20000000 00000000              799         DC    XL16'2000000000000000000000000000000C'       V1
000012F4  00000000 0000000C
000012FC  00000000 00000000              800         DC    XL16'0000000000000000000000000000022C'       V2
00001304  00000000 0000022C

                                         801
                                         802         VRI_G VSRP,159,31,1,3                shamt=31 (left) (overflow)
00001310                                 803+        DS    0FD
00001310                       00001310  804+        USING *,R5               base for test data and test routine
00001310  00001330                       805+T5      DC    A(X5)               address of test routine
00001314  0005                           806+        DC    H'5'                test number
00001316  00                             807+        DC    X'00'
00001317  9F                             808+        DC    HL1'159'            i3
00001318  1F                             809+        DC    HL1'31'             i4
00001319  01                             810+        DC    HL1'1'              m5
0000131A  03                             811+        DC    HL1'3'              cc
0000131B  0E                             812+        DC    HL1'14'             cc failed mask
0000131C  00001364                       813+V2_5    DC    A(RE5+16)           address of v2: 16-byte packed decimal
00001320  E5E2D9D7 40404040              814+        DC    CL8'VSRP'           instruction name
00001328  00000010                       815+        DC    A(16)               result length
0000132C  00001354                       816+REA5    DC    A(RE5)              result address
                                         817+*                                INSTRUCTION UNDER TEST ROUTINE
00001330                                 818+X5      DS    0F
00001330  E320 500C 0014        0000131C 819+        LGF   R2,V2_5             get v2
00001336  E722 0000 0006        00000000 820+        VL    V2,0(R2)
0000133C  E612 1F19 F059                 821+        VSRP  V1,V2,159,31,1       test instruction
00001342  E710 8F10 000E        00001110 822+        VST   V1,V10UTPUT         save result
00001348  B98D 0020                      823+        EPSW  R2,R0               exptract psw
0000134C  5020 8EF4             000010F4 824+        ST    R2,CCPSW               to save CC
00001350  07FB                           825+        BR    R11                 return
00001354                                 826+RE5     DC    0F
00001354                                 827+        DROP  R5
00001354  00000000 00000000              828         DC    XL16'0000000000000000000000000000000C'       V1
0000135C  00000000 0000000C
00001364  00000000 00000000              829         DC    XL16'0000000000000000000000000000022D'       V2
0000136C  00000000 0000022D

                                         830
                                         831         VRI_G VSRP,159,127,1,2                shamt=-1 (right)
00001378                                 832+        DS    0FD
00001378                       00001378  833+        USING *,R5               base for test data and test routine
00001378  00001398                       834+T6      DC    A(X6)               address of test routine
0000137C  0006                           835+        DC    H'6'                test number
0000137E  00                             836+        DC    X'00'
```

```
  LOC         OBJECT CODE      ADDR1    ADDR2    STMT

0000137F  9F                                    837+        DC    HL1'159'            i3
00001380  7F                                    838+        DC    HL1'127'            i4
00001381  01                                    839+        DC    HL1'1'             m5
00001382  02                                    840+        DC    HL1'2'             cc
00001383  0D                                    841+        DC    HL1'13'            cc failed mask
00001384  000013CC                              842+V2_6    DC    A(RE6+16)          address of v2: 16-byte packed decimal
00001388  E5E2D9D7 40404040                     843+        DC    CL8'VSRP'          instruction name
00001390  00000010                              844+        DC    A(16)              result length
00001394  000013BC                              845+REA6    DC    A(RE6)             result address
                                                846+*                               INSTRUCTION UNDER TEST ROUTINE
00001398                                        847+X6      DS    0F
00001398  E320 500C 0014            00001384    848+        LGF   R2,V2_6            get v2
0000139E  E722 0000 0006            00000000    849+        VL    V2,0(R2)
000013A4  E612 7F19 F059                        850+        VSRP  V1,V2,159,127,1      test instruction
000013AA  E710 8F10 000E            00001110    851+        VST   V1,V10UTPUT        save result
000013B0  B98D 0020                             852+        EPSW  R2,R0             exptract psw
000013B4  5020 8EF4                 000010F4    853+        ST    R2,CCPSW                to save CC
000013B8  07FB                                  854+        BR    R11               return
000013BC                                        855+RE6     DC    0F
000013BC                                        856+        DROP  R5
000013BC  00000000 00000000                     857         DC    XL16'0000000000000000000000000000002C'    V1
000013C4  00000000 0000002C
000013CC  00000000 00000000                     858         DC    XL16'0000000000000000000000000000022C'    V2
000013D4  00000000 0000022C
                                                859
                                                860         VRI_G VSRP,159,255,1,2          shamt=-1 (right) drd=1
000013E0                                        861+        DS    0FD
000013E0                          000013E0      862+        USING *,R5               base for test data and test routine
000013E0  00001400                              863+T7      DC    A(X7)             address of test routine
000013E4  0007                                  864+        DC    H'7'              test number
000013E6  00                                    865+        DC    X'00'
000013E7  9F                                    866+        DC    HL1'159'            i3
000013E8  FF                                    867+        DC    HL1'255'            i4
000013E9  01                                    868+        DC    HL1'1'             m5
000013EA  02                                    869+        DC    HL1'2'             cc
000013EB  0D                                    870+        DC    HL1'13'            cc failed mask
000013EC  00001434                              871+V2_7    DC    A(RE7+16)          address of v2: 16-byte packed decimal
000013F0  E5E2D9D7 40404040                     872+        DC    CL8'VSRP'          instruction name
000013F8  00000010                              873+        DC    A(16)              result length
000013FC  00001424                              874+REA7    DC    A(RE7)             result address
                                                875+*                               INSTRUCTION UNDER TEST ROUTINE
00001400                                        876+X7      DS    0F
00001400  E320 500C 0014            000013EC    877+        LGF   R2,V2_7            get v2
00001406  E722 0000 0006            00000000    878+        VL    V2,0(R2)
0000140C  E612 FF19 F059                        879+        VSRP  V1,V2,159,255,1      test instruction
00001412  E710 8F10 000E            00001110    880+        VST   V1,V10UTPUT        save result
00001418  B98D 0020                             881+        EPSW  R2,R0             exptract psw
0000141C  5020 8EF4                 000010F4    882+        ST    R2,CCPSW                to save CC
00001420  07FB                                  883+        BR    R11               return
00001424                                        884+RE7     DC    0F
00001424                                        885+        DROP  R5
00001424  00000000 00000000                     886         DC    XL16'0000000000000000000000000000003C'    V1
0000142C  00000000 0000003C
00001434  00000000 00000000                     887         DC    XL16'0000000000000000000000000000028C'    V2
0000143C  00000000 0000028C
                                                888
```

```
   LOC        OBJECT CODE      ADDR1      ADDR2     STMT

                                                   889           VRI_G VSRP,159,252,1,1              shamt=-4 (right) drd=1
00001448                                           890+          DS    0FD
00001448                      00001448             891+          USING *,R5                   base for test data and test routine
00001448   00001468                                892+T8        DC    A(X8)                   address of test routine
0000144C   0008                                    893+          DC    H'8'                    test number
0000144E   00                                      894+          DC    X'00'
0000144F   9F                                       895+          DC    HL1'159'                i3
00001450   FC                                       896+          DC    HL1'252'                i4
00001451   01                                       897+          DC    HL1'1'                  m5
00001452   01                                       898+          DC    HL1'1'                  cc
00001453   0B                                       899+          DC    HL1'11'                 cc failed mask
00001454   0000149C                                 900+V2_8      DC    A(RE8+16)               address of v2: 16-byte packed decimal
00001458   E5E2D9D7 40404040                        901+          DC    CL8'VSRP'               instruction name
00001460   00000010                                 902+          DC    A(16)                   result length
00001464   0000148C                                 903+REA8      DC    A(RE8)                  result address
                                                    904+*                                      INSTRUCTION UNDER TEST ROUTINE
00001468                                            905+X8        DS    0F
00001468   E320 500C 0014               00001454    906+          LGF   R2,V2_8                 get v2
0000146E   E722 0000 0006               00000000    907+          VL    V2,0(R2)
00001474   E612 FC19 F059                           908+          VSRP  V1,V2,159,252,1          test instruction
0000147A   E710 8F10 000E               00001110    909+          VST   V1,V1OUTPUT             save result
00001480   B98D 0020                                910+          EPSW  R2,R0                   exptract psw
00001484   5020 8EF4                    000010F4    911+          ST    R2,CCPSW                   to save CC
00001488   07FB                                     912+          BR    R11                     return
0000148C                                            913+RE8       DC    0F
0000148C                                            914+          DROP  R5
0000148C   00000000 00000000                        915           DC    XL16'0000000000000000000000000000002D'       V1
00001494   00000000 0000002D
0000149C   00000000 00000000                        916           DC    XL16'0000000000000000000000000015028D'       V2
000014A4   00000000 0015028D
                                                    917
                                                    918           VRI_G VSRP,159,249,1,0              shamt=-7 (right) drd=1
000014B0                                            919+          DS    0FD
000014B0                      000014B0              920+          USING *,R5                   base for test data and test routine
000014B0   000014D0                                 921+T9        DC    A(X9)                   address of test routine
000014B4   0009                                     922+          DC    H'9'                    test number
000014B6   00                                       923+          DC    X'00'
000014B7   9F                                       924+          DC    HL1'159'                i3
000014B8   F9                                       925+          DC    HL1'249'                i4
000014B9   01                                       926+          DC    HL1'1'                  m5
000014BA   00                                       927+          DC    HL1'0'                  cc
000014BB   07                                       928+          DC    HL1'7'                  cc failed mask
000014BC   00001504                                 929+V2_9      DC    A(RE9+16)               address of v2: 16-byte packed decimal
000014C0   E5E2D9D7 40404040                        930+          DC    CL8'VSRP'               instruction name
000014C8   00000010                                 931+          DC    A(16)                   result length
000014CC   000014F4                                 932+REA9      DC    A(RE9)                  result address
                                                    933+*                                      INSTRUCTION UNDER TEST ROUTINE
000014D0                                            934+X9        DS    0F
000014D0   E320 500C 0014               000014BC    935+          LGF   R2,V2_9                 get v2
000014D6   E722 0000 0006               00000000    936+          VL    V2,0(R2)
000014DC   E612 F919 F059                           937+          VSRP  V1,V2,159,249,1          test instruction
000014E2   E710 8F10 000E               00001110    938+          VST   V1,V1OUTPUT             save result
000014E8   B98D 0020                                939+          EPSW  R2,R0                   exptract psw
000014EC   5020 8EF4                    000010F4    940+          ST    R2,CCPSW                   to save CC
000014F0   07FB                                     941+          BR    R11                     return
000014F4                                            942+RE9       DC    0F
```

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   LOC        OBJECT CODE      ADDR1      ADDR2    STMT

000014F4                                         943+          DROP   R5
000014F4   00000000 00000000                     944           DC     XL16'0000000000000000000000000000000C'      V1 (note: C)
000014FC   00000000 0000000C
00001504   00000000 00000000                     945           DC     XL16'0000000000000000000000000000028D'      V2
0000150C   00000000 0000028D
                                                 946
                                                 947           VRI_G  VSRP,159,225,1,1              shamt=-31 (right) drd=1
00001518                                         948+          DS     0FD
00001518                        00001518         949+          USING  *,R5                     base for test data and test routine
00001518   00001538                              950+T10       DC     A(X10)                   address of test routine
0000151C   000A                                  951+          DC     H'10'                    test number
0000151E   00                                    952+          DC     X'00'
0000151F   9F                                    953+          DC     HL1'159'                 i3
00001520   E1                                    954+          DC     HL1'225'                 i4
00001521   01                                    955+          DC     HL1'1'                   m5
00001522   01                                    956+          DC     HL1'1'                   cc
00001523   0B                                    957+          DC     HL1'11'                  cc failed mask
00001524   0000156C                              958+V2_10     DC     A(RE10+16)               address of v2: 16-byte packed decimal
00001528   E5E2D9D7 40404040                     959+          DC     CL8'VSRP'                instruction name
00001530   00000010                              960+          DC     A(16)                    result length
00001534   0000155C                              961+REA10     DC     A(RE10)                  result address
                                                 962+*                                         INSTRUCTION UNDER TEST ROUTINE
00001538                                         963+X10       DS     0F
00001538   E320 500C 0014               00001524 964+          LGF    R2,V2_10                 get v2
0000153E   E722 0000 0006               00000000 965+          VL     V2,0(R2)
00001544   E612 E119 F059                         966+          VSRP   V1,V2,159,225,1           test instruction
0000154A   E710 8F10 000E               00001110 967+          VST    V1,V10UTPUT              save result
00001550   B98D 0020                              968+          EPSW   R2,R0                    exptract psw
00001554   5020 8EF4                    000010F4 969+          ST     R2,CCPSW                      to save CC
00001558   07FB                                   970+          BR     R11                      return
0000155C                                          971+RE10     DC     0F
0000155C                                          972+          DROP   R5
0000155C   00000000 00000000                      973          DC     XL16'0000000000000000000000000000001D'      V1 (note: C)
00001564   00000000 0000001D
0000156C   99990000 00000000                      974          DC     XL16'9999000000000000000000000000028D'      V2
00001574   00000000 0000028D
                                                 975
                                                 976           VRI_G  VSRP,159,224,1,0              shamt=-32 (right) drd=1
00001580                                         977+          DS     0FD
00001580                        00001580         978+          USING  *,R5                     base for test data and test routine
00001580   000015A0                              979+T11       DC     A(X11)                   address of test routine
00001584   000B                                  980+          DC     H'11'                    test number
00001586   00                                    981+          DC     X'00'
00001587   9F                                    982+          DC     HL1'159'                 i3
00001588   E0                                    983+          DC     HL1'224'                 i4
00001589   01                                    984+          DC     HL1'1'                   m5
0000158A   00                                    985+          DC     HL1'0'                   cc
0000158B   07                                    986+          DC     HL1'7'                   cc failed mask
0000158C   000015D4                              987+V2_11     DC     A(RE11+16)               address of v2: 16-byte packed decimal
00001590   E5E2D9D7 40404040                     988+          DC     CL8'VSRP'                instruction name
00001598   00000010                              989+          DC     A(16)                    result length
0000159C   000015C4                              990+REA11     DC     A(RE11)                  result address
                                                 991+*                                         INSTRUCTION UNDER TEST ROUTINE
000015A0                                         992+X11       DS     0F
000015A0   E320 500C 0014               0000158C 993+          LGF    R2,V2_11                 get v2
000015A6   E722 0000 0006               00000000 994+          VL     V2,0(R2)
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  LOC           OBJECT CODE        ADDR1      ADDR2     STMT

000015AC  E612 E019 F059                               995+           VSRP   V1, V2, 159, 224, 1    test instruction
000015B2  E710 8F10 000E                    00001110   996+           VST    V1, V10UTPUT          save result
000015B8  B98D 0020                                    997+           EPSW   R2, R0               exptract psw
000015BC  5020 8EF4                         000010F4   998+           ST     R2, CCPSW               to save CC
000015C0  07FB                                         999+           BR     R11                  return
000015C4                                              1000+RE11       DC     0F
000015C4                                              1001+           DROP   R5
000015C4  00000000 00000000                           1002           DC     XL16'000000000000000000000000000000C'     V1 (note: C)
000015CC  00000000 0000000C
000015D4  90000000 00000000                           1003           DC     XL16'90000000000000000000000000000028D'    V2
000015DC  00000000 0000028D
                                                      1004
                                                      1005  * m5 tests (note: cs is always 1)
                                                      1006  *                                      m5=1   (p2=0,  p1=0,  cs=1)
                                                      1007  *                                      m5=3   (p2=0,  p1=1,  cs=1)
                                                      1008  *                                      m5=9   (p2=1,  p1=0,  cs=1)
                                                      1009  *                                      m5=11  (p2=1,  p1=1,  cs=1)
                                                      1010
                                                      1011           VRI_G  VSRP, 159, 255, 3, 2    shamt=-1 (right) drd=1 p1=1
000015E8                                              1012+          DS     0FD
000015E8                             000015E8         1013+          USING  *, R5                 base for test data and test routine
000015E8  00001608                                   1014+T12        DC     A(X12)               address of test routine
000015EC  000C                                       1015+          DC     H'12'                test number
000015EE  00                                         1016+          DC     X'00'
000015EF  9F                                         1017+          DC     HL1'159'             i3
000015F0  FF                                         1018+          DC     HL1'255'             i4
000015F1  03                                         1019+          DC     HL1'3'               m5
000015F2  02                                         1020+          DC     HL1'2'               cc
000015F3  0D                                         1021+          DC     HL1'13'              cc failed mask
000015F4  0000163C                                   1022+V2_12      DC     A(RE12+16)           address of v2: 16-byte packed decimal
000015F8  E5E2D9D7 40404040                          1023+          DC     CL8'VSRP'            instruction name
00001600  00000010                                   1024+          DC     A(16)                result length
00001604  0000162C                                   1025+REA12      DC     A(RE12)              result address
                                                      1026+*                                    INSTRUCTION UNDER TEST ROUTINE
00001608                                              1027+X12        DS     0F
00001608  E320 500C 0014                    000015F4  1028+          LGF    R2, V2_12            get v2
0000160E  E722 0000 0006                    00000000  1029+          VL     V2, 0(R2)
00001614  E612 FF39 F059                               1030+          VSRP   V1, V2, 159, 255, 3    test instruction
0000161A  E710 8F10 000E                    00001110  1031+          VST    V1, V10UTPUT         save result
00001620  B98D 0020                                    1032+          EPSW   R2, R0               exptract psw
00001624  5020 8EF4                         000010F4  1033+          ST     R2, CCPSW               to save CC
00001628  07FB                                         1034+          BR     R11                  return
0000162C                                              1035+RE12       DC     0F
0000162C                                              1036+          DROP   R5
0000162C  00000000 00000000                           1037           DC     XL16'000000000000000000000000000003F'     V1
00001634  00000000 0000003F
0000163C  00000000 00000000                           1038           DC     XL16'00000000000000000000000000000028D'    V2
00001644  00000000 0000028D
                                                      1039
                                                      1040           VRI_G  VSRP, 159, 255, 9, 2    shamt=-1 (right) drd=1  p2=1 p1=0
00001650                                              1041+          DS     0FD
00001650                             00001650         1042+          USING  *, R5                base for test data and test routine
00001650  00001670                                   1043+T13        DC     A(X13)               address of test routine
00001654  000D                                       1044+          DC     H'13'                test number
00001656  00                                         1045+          DC     X'00'
00001657  9F                                         1046+          DC     HL1'159'             i3
```

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  LOC           OBJECT CODE      ADDR1     ADDR2     STMT

00001658  FF                                         1047+       DC    HL1'255'          i4
00001659  09                                         1048+       DC    HL1'9'            m5
0000165A  02                                         1049+       DC    HL1'2'            cc
0000165B  0D                                         1050+       DC    HL1'13'           cc failed mask
0000165C  000016A4                                   1051+V2_13   DC    A(RE13+16)        address of v2: 16-byte packed decimal
00001660  E5E2D9D7 40404040                          1052+       DC    CL8'VSRP'         instruction name
00001668  00000010                                   1053+       DC    A(16)             result length
0000166C  00001694                                   1054+REA13  DC    A(RE13)           result address
                                                     1055+*                              INSTRUCTION UNDER TEST ROUTINE
00001670                                             1056+X13     DS    0F
00001670  E320 500C 0014              0000165C       1057+       LGF   R2,V2_13          get v2
00001676  E722 0000 0006              00000000       1058+       VL    V2,0(R2)
0000167C  E612 FF99 F059                             1059+       VSRP  V1,V2,159,255,9    test instruction
00001682  E710 8F10 000E              00001110       1060+       VST   V1,V10UTPUT       save result
00001688  B98D 0020                                  1061+       EPSW  R2,R0             exptract psw
0000168C  5020 8EF4                   000010F4       1062+       ST    R2,CCPSW              to save CC
00001690  07FB                                       1063+       BR    R11               return
00001694                                             1064+RE13   DC    0F
00001694                                             1065+       DROP  R5
00001694  00000000 00000000                          1066        DC    XL16'0000000000000000000000000000003C'     V1
0000169C  00000000 0000003C
000016A4  00000000 00000000                          1067        DC    XL16'0000000000000000000000000000028D'     V2
000016AC  00000000 0000028D

                                                     1068
                                                     1069        VRI_G VSRP,159,255,11,2     shamt=-1 (right) drd=1 p2=1 p1=1
000016B8                                             1070+       DS    0FD
000016B8              000016B8                       1071+       USING *,R5                base for test data and test routine
000016B8  000016D8                                   1072+T14    DC    A(X14)            address of test routine
000016BC  000E                                       1073+       DC    H'14'             test number
000016BE  00                                         1074+       DC    X'00'
000016BF  9F                                         1075+       DC    HL1'159'          i3
000016C0  FF                                         1076+       DC    HL1'255'          i4
000016C1  0B                                         1077+       DC    HL1'11'           m5
000016C2  02                                         1078+       DC    HL1'2'            cc
000016C3  0D                                         1079+       DC    HL1'13'           cc failed mask
000016C4  0000170C                                   1080+V2_14   DC    A(RE14+16)        address of v2: 16-byte packed decimal
000016C8  E5E2D9D7 40404040                          1081+       DC    CL8'VSRP'         instruction name
000016D0  00000010                                   1082+       DC    A(16)             result length
000016D4  000016FC                                   1083+REA14  DC    A(RE14)           result address
                                                     1084+*                              INSTRUCTION UNDER TEST ROUTINE
000016D8                                             1085+X14     DS    0F
000016D8  E320 500C 0014              000016C4       1086+       LGF   R2,V2_14          get v2
000016DE  E722 0000 0006              00000000       1087+       VL    V2,0(R2)
000016E4  E612 FFB9 F059                             1088+       VSRP  V1,V2,159,255,11   test instruction
000016EA  E710 8F10 000E              00001110       1089+       VST   V1,V10UTPUT       save result
000016F0  B98D 0020                                  1090+       EPSW  R2,R0             exptract psw
000016F4  5020 8EF4                   000010F4       1091+       ST    R2,CCPSW              to save CC
000016F8  07FB                                       1092+       BR    R11               return
000016FC                                             1093+RE14   DC    0F
000016FC                                             1094+       DROP  R5
000016FC  00000000 00000000                          1095        DC    XL16'0000000000000000000000000000003F'     V1
00001704  00000000 0000003F
0000170C  00000000 00000000                          1096        DC    XL16'0000000000000000000000000000028D'     V2
00001714  00000000 0000028D

                                                     1097
                                                     1098        VRI_G VSRP,159,0,3,2         shamt=0         p2=0 p1=1
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  LOC        OBJECT CODE      ADDR1     ADDR2    STMT

 00001720                                        1099+          DS    0FD
 00001720                      00001720          1100+          USING *,R5              base for test data and test routine
 00001720  00001740                              1101+T15       DC    A(X15)            address of test routine
 00001724  000F                                  1102+          DC    H'15'             test number
 00001726  00                                    1103+          DC    X'00'
 00001727  9F                                    1104+          DC    HL1'159'          i3
 00001728  00                                    1105+          DC    HL1'0'            i4
 00001729  03                                    1106+          DC    HL1'3'            m5
 0000172A  02                                    1107+          DC    HL1'2'            cc
 0000172B  0D                                    1108+          DC    HL1'13'           cc failed mask
 0000172C  00001774                              1109+V2_15     DC    A(RE15+16)        address of v2: 16-byte packed decimal
 00001730  E5E2D9D7 40404040                     1110+          DC    CL8'VSRP'         instruction name
 00001738  00000010                              1111+          DC    A(16)             result length
 0000173C  00001764                              1112+REA15     DC    A(RE15)           result address
                                                 1113+*                                INSTRUCTION UNDER TEST ROUTINE
 00001740                                        1114+X15       DS    0F
 00001740  E320 500C 0014               0000172C 1115+          LGF   R2,V2_15          get v2
 00001746  E722 0000 0006               00000000 1116+          VL    V2,0(R2)
 0000174C  E612 0039 F059                         1117+          VSRP  V1,V2,159,0,3      test instruction
 00001752  E710 8F10 000E               00001110 1118+          VST   V1,V10UTPUT       save result
 00001758  B98D 0020                             1119+          EPSW  R2,R0             exptract psw
 0000175C  5020 8EF4                    000010F4 1120+          ST    R2,CCPSW             to save CC
 00001760  07FB                                  1121+          BR    R11               return
 00001764                                        1122+RE15      DC    0F
 00001764                                        1123+          DROP  R5
 00001764  00000000 00000000                     1124           DC    XL16'00000000000000000000000000000022F'      V1
 0000176C  00000000 0000022F
 00001774  00000000 00000000                     1125           DC    XL16'00000000000000000000000000000022C'      V2
 0000177C  00000000 0000022C

                                                 1126
                                                 1127           VRI_G VSRP,159,1,9,2                 shamt=1 (left)    p2=1 p1=0
 00001788                                        1128+          DS    0FD
 00001788                      00001788          1129+          USING *,R5              base for test data and test routine
 00001788  000017A8                              1130+T16       DC    A(X16)            address of test routine
 0000178C  0010                                  1131+          DC    H'16'             test number
 0000178E  00                                    1132+          DC    X'00'
 0000178F  9F                                    1133+          DC    HL1'159'          i3
 00001790  01                                    1134+          DC    HL1'1'            i4
 00001791  09                                    1135+          DC    HL1'9'            m5
 00001792  02                                    1136+          DC    HL1'2'            cc
 00001793  0D                                    1137+          DC    HL1'13'           cc failed mask
 00001794  000017DC                              1138+V2_16     DC    A(RE16+16)        address of v2: 16-byte packed decimal
 00001798  E5E2D9D7 40404040                     1139+          DC    CL8'VSRP'         instruction name
 000017A0  00000010                              1140+          DC    A(16)             result length
 000017A4  000017CC                              1141+REA16     DC    A(RE16)           result address
                                                 1142+*                                INSTRUCTION UNDER TEST ROUTINE
 000017A8                                        1143+X16       DS    0F
 000017A8  E320 500C 0014               00001794 1144+          LGF   R2,V2_16          get v2
 000017AE  E722 0000 0006               00000000 1145+          VL    V2,0(R2)
 000017B4  E612 0199 F059                         1146+          VSRP  V1,V2,159,1,9      test instruction
 000017BA  E710 8F10 000E               00001110 1147+          VST   V1,V10UTPUT       save result
 000017C0  B98D 0020                             1148+          EPSW  R2,R0             exptract psw
 000017C4  5020 8EF4                    000010F4 1149+          ST    R2,CCPSW             to save CC
 000017C8  07FB                                  1150+          BR    R11               return
 000017CC                                        1151+RE16      DC    0F
 000017CC                                        1152+          DROP  R5
```

```
  LOC        OBJECT CODE      ADDR1      ADDR2    STMT

000017CC  00000000 00000000                      1153        DC     XL16'000000000000000000000000000220C'      V1
000017D4  00000000 0000220C
000017DC  00000000 00000000                      1154        DC     XL16'0000000000000000000000000000022D'      V2
000017E4  00000000 0000022D
                                                 1155
                                                 1156        VRI_G VSRP,159,7,11,2              shamt=7 (left)    p2=1 p1=1
000017F0                                         1157+       DS     0FD
000017F0                        000017F0         1158+       USING *,R5                  base for test data and test routine
000017F0  00001810                               1159+T17    DC     A(X17)                 address of test routine
000017F4  0011                                   1160+       DC     H'17'                  test number
000017F6  00                                     1161+       DC     X'00'
000017F7  9F                                     1162+       DC     HL1'159'               i3
000017F8  07                                     1163+       DC     HL1'7'                 i4
000017F9  0B                                     1164+       DC     HL1'11'                m5
000017FA  02                                     1165+       DC     HL1'2'                 cc
000017FB  0D                                     1166+       DC     HL1'13'                cc failed mask
000017FC  00001844                               1167+V2_17  DC     A(RE17+16)             address of v2: 16-byte packed decimal
00001800  E5E2D9D7 40404040                      1168+       DC     CL8'VSRP'              instruction name
00001808  00000010                               1169+       DC     A(16)                  result length
0000180C  00001834                               1170+REA17  DC     A(RE17)                result address
                                                 1171+*                                   INSTRUCTION UNDER TEST ROUTINE
00001810                                         1172+X17    DS     0F
00001810  E320 500C 0014                000017FC 1173+       LGF    R2,V2_17               get v2
00001816  E722 0000 0006                00000000 1174+       VL     V2,0(R2)
0000181C  E612 07B9 F059                         1175+       VSRP   V1,V2,159,7,11          test instruction
00001822  E710 8F10 000E                00001110 1176+       VST    V1,V10UTPUT            save result
00001828  B98D 0020                              1177+       EPSW   R2,R0                  exptract psw
0000182C  5020 8EF4                     000010F4 1178+       ST     R2,CCPSW                  to save CC
00001830  07FB                                   1179+       BR     R11                    return
00001834                                         1180+RE17   DC     0F
00001834                                         1181+       DROP   R5
00001834  00000000 00000000                      1182        DC     XL16'000000000000000000000220000000F'      V1
0000183C  00000022 0000000F
00001844  00000000 00000000                      1183        DC     XL16'0000000000000000000000000000022D'      V2
0000184C  00000000 0000022D
                                                 1184
                                                 1185 *----------------------------------------------------------------
                                                 1186 * VPSOP - VECTOR PERFORM SIGN OPERATION DECIMAL
                                                 1187 *----------------------------------------------------------------
                                                 1188 * VPSOP with some I3, I4 and M5's
                                                 1189 * I3 tests
                                                 1190 *                         i4=129 (iom=1, rdc=1)
                                                 1191 *                         i4=132 (iom=1, rdc=4)
                                                 1192 *                         i4=135 (iom=1, rdc=7)
                                                 1193 *                         i4=142 (iom=1, rdc=14)
                                                 1194 *                         i4=159 (iom=1, rdc=31)
                                                 1195 * I4 : so=00
                                                 1196 *         i4=128 (nv=1, nz=0, //, so=00, pc=0, sv=0)
                                                 1197 *         i4=130 (nv=1, nz=0, //, so=00, pc=1, sv=0)
                                                 1198 *
                                                 1199 *         i4=192 (nv=1, nz=1, //, so=00, pc=0, sv=0)
                                                 1200 *         i4=194 (nv=1, nz=1, //, so=00, pc=1, sv=0)
                                                 1201
                                                 1202 * I4 : so=01
                                                 1203 *         i4=132 (nv=1, nz=0, //, so=01, pc=0, sv=0)
                                                 1204 *         i4=134 (nv=1, nz=0, //, so=01, pc=1, sv=0)
```

```
  LOC            OBJECT CODE      ADDR1     ADDR2     STMT

                                                     1205 *
                                                     1206 *          i4=196 (nv=1, nz=1, //, so=01, pc=0, sv=0)
                                                     1207 *          i4=198 (nv=1, nz=1, //, so=01, pc=1, sv=0)
                                                     1208
                                                     1209
                                                     1210 * I4 : so=10
                                                     1211 *          i4=136 (nv=1, nz=0, //, so=10, pc=0, sv=0)
                                                     1212 *          i4=138 (nv=1, nz=0, //, so=10, pc=1, sv=0)
                                                     1213 *
                                                     1214 *          i4=200 (nv=1, nz=1, //, so=10, pc=0, sv=0)
                                                     1215 *          i4=202 (nv=1, nz=1, //, so=10, pc=1, sv=0)
                                                     1216
                                                     1217 * I4 : so=11
                                                     1218 *          i4=140 (nv=1, nz=0, //, so=11, pc=0, sv=0)
                                                     1219 *          i4=142 (nv=1, nz=0, //, so=11, pc=1, sv=0)
                                                     1220 *
                                                     1221 *          i4=204 (nv=1, nz=1, //, so=11, pc=0, sv=0)
                                                     1222 *          i4=206 (nv=1, nz=1, //, so=11, pc=1, sv=0)
                                                     1223
                                                     1224 * m5 tests (note: cs is always 1)
                                                     1225 *                                          m5=1  (cs=1)
                                                     1226 *
                                                     1227 * z/Architecture Principles of Operation, SA22-7832-12.
                                                     1228 * Figure 25-4. Operation of VECTOR PERFORM SIGN OPERATION DECIMAL
                                                     1229 * tests
                                                     1230 *
                                                     1231 *-------------------------------------------------------
                                                     1232 * SC=00 (maintain): nv=1 to avoid data exceptions
                                                     1233 *-------------------------------------------------------
                                                     1234 * V1:nonzero V2:positive    PC='0' NZ='â€"'                      V1_sign=C  CC=2
                                                     1235          VRI_G VPSOP,159,128,1,2           nz=0
  00001858                                           1236+        DS    0FD
  00001858                          00001858         1237+        USING *,R5                base for test data and test routine
  00001858  00001878                                 1238+T18     DC    A(X18)              address of test routine
  0000185C  0012                                     1239+        DC    H'18'               test number
  0000185E  00                                       1240+        DC    X'00'
  0000185F  9F                                       1241+        DC    HL1'159'            i3
  00001860  80                                       1242+        DC    HL1'128'            i4
  00001861  01                                       1243+        DC    HL1'1'              m5
  00001862  02                                       1244+        DC    HL1'2'              cc
  00001863  0D                                       1245+        DC    HL1'13'             cc failed mask
  00001864  000018AC                                 1246+V2_18   DC    A(RE18+16)          address of v2: 16-byte packed decimal
  00001868  E5D7E2D6 D7404040                        1247+        DC    CL8'VPSOP'          instruction name
  00001870  00000010                                 1248+        DC    A(16)               result length
  00001874  0000189C                                 1249+REA18   DC    A(RE18)             result address
                                                     1250+*                                INSTRUCTION UNDER TEST ROUTINE
  00001878                                           1251+X18     DS    0F
  00001878  E320 500C 0014        00001864           1252+        LGF   R2,V2_18            get v2
  0000187E  E722 0000 0006        00000000           1253+        VL    V2,0(R2)
  00001884  E612 8019 F05B                           1254+        VPSOP V1,V2,159,128,1      test instruction
  0000188A  E710 8F10 000E        00001110           1255+        VST   V1,V1OUTPUT         save result
  00001890  B98D 0020                                1256+        EPSW  R2,R0               exptract psw
  00001894  5020 8EF4             000010F4           1257+        ST    R2,CCPSW              to save CC
  00001898  07FB                                     1258+        BR    R11                 return
  0000189C                                           1259+RE18    DC    0F
  0000189C                                           1260+        DROP  R5
```

```
  LOC          OBJECT CODE        ADDR1      ADDR2      STMT

0000189C   00000000 00000000                           1261          DC      XL16'00000000000000000000000220000000C'      V1
000018A4   00000022 0000000C
000018AC   00000000 00000000                           1262          DC      XL16'00000000000000000000000220000000F'      V2
000018B4   00000022 0000000F
                                                       1263
                                                       1264          VRI_G VPSOP,159,192,1,2              nz=1
000018C0                                               1265+         DS      0FD
000018C0                        000018C0               1266+         USING *,R5                       base for test data and test routine
000018C0   000018E0                                    1267+T19      DC      A(X19)                    address of test routine
000018C4   0013                                        1268+         DC      H'19'                     test number
000018C6   00                                          1269+         DC      X'00'
000018C7   9F                                          1270+         DC      HL1'159'                  i3
000018C8   C0                                          1271+         DC      HL1'192'                  i4
000018C9   01                                          1272+         DC      HL1'1'                    m5
000018CA   02                                          1273+         DC      HL1'2'                    cc
000018CB   0D                                          1274+         DC      HL1'13'                   cc failed mask
000018CC   00001914                                    1275+V2_19    DC      A(RE19+16)                address of v2: 16-byte packed decimal
000018D0   E5D7E2D6 D7404040                            1276+         DC      CL8'VPSOP'                instruction name
000018D8   00000010                                    1277+         DC      A(16)                     result length
000018DC   00001904                                    1278+REA19    DC      A(RE19)                   result address
                                                       1279+*                                         INSTRUCTION UNDER TEST ROUTINE
000018E0                                               1280+X19      DS      0F
000018E0   E320 500C 0014               000018CC        1281+         LGF     R2,V2_19                  get v2
000018E6   E722 0000 0006               00000000        1282+         VL      V2,0(R2)
000018EC   E612 C019 F05B                               1283+         VPSOP   V1,V2,159,192,1            test instruction
000018F2   E710 8F10 000E               00001110        1284+         VST     V1,V1OUTPUT               save result
000018F8   B98D 0020                                    1285+         EPSW    R2,R0                     exptract psw
000018FC   5020 8EF4                    000010F4        1286+         ST      R2,CCPSW                      to save CC
00001900   07FB                                         1287+         BR      R11                       return
00001904                                               1288+RE19     DC      0F
00001904                                               1289+         DROP    R5
00001904   00000000 00000000                            1290          DC      XL16'00000000000000000000000220000000C'      V1
0000190C   00000022 0000000C
00001914   00000000 00000000                            1291          DC      XL16'00000000000000000000000220000000F'      V2
0000191C   00000022 0000000F
                                                       1292
                                                       1293 * V1:nonzero V2:positive    PC='1' NZ='‒'                    V1_sign=F  CC=2
                                                       1294          VRI_G VPSOP,159,130,1,2              nz=0
00001928                                               1295+         DS      0FD
00001928                        00001928               1296+         USING *,R5                       base for test data and test routine
00001928   00001948                                    1297+T20      DC      A(X20)                    address of test routine
0000192C   0014                                        1298+         DC      H'20'                     test number
0000192E   00                                          1299+         DC      X'00'
0000192F   9F                                          1300+         DC      HL1'159'                  i3
00001930   82                                          1301+         DC      HL1'130'                  i4
00001931   01                                          1302+         DC      HL1'1'                    m5
00001932   02                                          1303+         DC      HL1'2'                    cc
00001933   0D                                          1304+         DC      HL1'13'                   cc failed mask
00001934   0000197C                                    1305+V2_20    DC      A(RE20+16)                address of v2: 16-byte packed decimal
00001938   E5D7E2D6 D7404040                            1306+         DC      CL8'VPSOP'                instruction name
00001940   00000010                                    1307+         DC      A(16)                     result length
00001944   0000196C                                    1308+REA20    DC      A(RE20)                   result address
                                                       1309+*                                         INSTRUCTION UNDER TEST ROUTINE
00001948                                               1310+X20      DS      0F
00001948   E320 500C 0014               00001934        1311+         LGF     R2,V2_20                  get v2
0000194E   E722 0000 0006               00000000        1312+         VL      V2,0(R2)
```

```
  LOC          OBJECT CODE       ADDR1     ADDR2     STMT

00001954  E612 8219 F05B                            1313+        VPSOP  V1, V2, 159, 130, 1    test instruction
0000195A  E710 8F10 000E                  00001110  1314+        VST    V1, V10UTPUT      save result
00001960  B98D 0020                                 1315+        EPSW   R2, R0            exptract psw
00001964  5020 8EF4                       000010F4  1316+        ST     R2, CCPSW             to save CC
00001968  07FB                                      1317+        BR     R11               return
0000196C                                            1318+RE20    DC     0F
0000196C                                            1319+        DROP   R5
0000196C  00000000 00000000                         1320         DC     XL16'00000000000000000000000220000000F'      V1
00001974  00000022 0000000F
0000197C  00000000 00000000                         1321         DC     XL16'00000000000000000000000220000000A'      V2
00001984  00000022 0000000A

                                                    1322
                                                    1323         VRI_G  VPSOP, 159, 194, 1, 2         nz=1
00001990                                            1324+        DS     0FD
00001990                            00001990        1325+        USING  *, R5              base for test data and test routine
00001990  000019B0                                  1326+T21     DC     A(X21)             address of test routine
00001994  0015                                      1327+        DC     H'21'              test number
00001996  00                                        1328+        DC     X'00'
00001997  9F                                        1329+        DC     HL1'159'           i3
00001998  C2                                        1330+        DC     HL1'194'           i4
00001999  01                                        1331+        DC     HL1'1'             m5
0000199A  02                                        1332+        DC     HL1'2'             cc
0000199B  0D                                        1333+        DC     HL1'13'            cc failed mask
0000199C  000019E4                                  1334+V2_21   DC     A(RE21+16)         address of v2: 16-byte packed decimal
000019A0  E5D7E2D6 D7404040                         1335+        DC     CL8'VPSOP'         instruction name
000019A8  00000010                                  1336+        DC     A(16)              result length
000019AC  000019D4                                  1337+REA21   DC     A(RE21)            result address
                                                    1338+*                                 INSTRUCTION UNDER TEST ROUTINE
000019B0                                            1339+X21     DS     0F
000019B0  E320 500C 0014                  0000199C  1340+        LGF    R2, V2_21          get v2
000019B6  E722 0000 0006                  00000000  1341+        VL     V2, 0(R2)
000019BC  E612 C219 F05B                            1342+        VPSOP  V1, V2, 159, 194, 1    test instruction
000019C2  E710 8F10 000E                  00001110  1343+        VST    V1, V10UTPUT      save result
000019C8  B98D 0020                                 1344+        EPSW   R2, R0            exptract psw
000019CC  5020 8EF4                       000010F4  1345+        ST     R2, CCPSW             to save CC
000019D0  07FB                                      1346+        BR     R11               return
000019D4                                            1347+RE21    DC     0F
000019D4                                            1348+        DROP   R5
000019D4  00000000 00000000                         1349         DC     XL16'00000000000000000000000220000000F'      V1
000019DC  00000022 0000000F
000019E4  00000000 00000000                         1350         DC     XL16'00000000000000000000000220000000A'      V2
000019EC  00000022 0000000A
                                                    1351
                                                    1352 * V1: nonzero V2: negative    PC='-' NZ='â€"'                   V1_sign=D  CC=1
                                                    1353         VRI_G  VPSOP, 159, 128, 1, 1         nz=0  pc=0
000019F8                                            1354+        DS     0FD
000019F8                            000019F8        1355+        USING  *, R5              base for test data and test routine
000019F8  00001A18                                  1356+T22     DC     A(X22)             address of test routine
000019FC  0016                                      1357+        DC     H'22'              test number
000019FE  00                                        1358+        DC     X'00'
000019FF  9F                                        1359+        DC     HL1'159'           i3
00001A00  80                                        1360+        DC     HL1'128'           i4
00001A01  01                                        1361+        DC     HL1'1'             m5
00001A02  01                                        1362+        DC     HL1'1'             cc
00001A03  0B                                        1363+        DC     HL1'11'            cc failed mask
00001A04  00001A4C                                  1364+V2_22   DC     A(RE22+16)         address of v2: 16-byte packed decimal
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001A08	E5D7E2D6 D7404040			1365+	DC	CL8'VPSOP'	instruction name
00001A10	00000010			1366+	DC	A(16)	result length
00001A14	00001A3C			1367+REA22	DC	A(RE22)	result address
				1368+*			INSTRUCTION UNDER TEST ROUTINE
00001A18				1369+X22	DS	0F	
00001A18	E320 500C 0014		00001A04	1370+	LGF	R2,V2_22	get v2
00001A1E	E722 0000 0006		00000000	1371+	VL	V2,0(R2)	
00001A24	E612 8019 F05B			1372+	VPSOP	V1,V2,159,128,1	test instruction
00001A2A	E710 8F10 000E		00001110	1373+	VST	V1,V10UTPUT	save result
00001A30	B98D 0020			1374+	EPSW	R2,R0	exptract psw
00001A34	5020 8EF4		000010F4	1375+	ST	R2,CCPSW	to save CC
00001A38	07FB			1376+	BR	R11	return
00001A3C				1377+RE22	DC	0F	
00001A3C				1378+	DROP	R5	
00001A3C	00000000 00000000			1379	DC	XL16'00000000000000000000220000000D'	V1
00001A44	00000022 0000000D						
00001A4C	00000000 00000000			1380	DC	XL16'00000000000000000000220000000B'	V2
00001A54	00000022 0000000B						
				1381			
				1382	VRI_G	VPSOP,159,130,1,1	nz=0 pc=1
00001A60				1383+	DS	0FD	
00001A60		00001A60		1384+	USING	*,R5	base for test data and test routine
00001A60	00001A80			1385+T23	DC	A(X23)	address of test routine
00001A64	0017			1386+	DC	H'23'	test number
00001A66	00			1387+	DC	X'00'	
00001A67	9F			1388+	DC	HL1'159'	i3
00001A68	82			1389+	DC	HL1'130'	i4
00001A69	01			1390+	DC	HL1'1'	m5
00001A6A	01			1391+	DC	HL1'1'	cc
00001A6B	0B			1392+	DC	HL1'11'	cc failed mask
00001A6C	00001AB4			1393+V2_23	DC	A(RE23+16)	address of v2: 16-byte packed decimal
00001A70	E5D7E2D6 D7404040			1394+	DC	CL8'VPSOP'	instruction name
00001A78	00000010			1395+	DC	A(16)	result length
00001A7C	00001AA4			1396+REA23	DC	A(RE23)	result address
				1397+*			INSTRUCTION UNDER TEST ROUTINE
00001A80				1398+X23	DS	0F	
00001A80	E320 500C 0014		00001A6C	1399+	LGF	R2,V2_23	get v2
00001A86	E722 0000 0006		00000000	1400+	VL	V2,0(R2)	
00001A8C	E612 8219 F05B			1401+	VPSOP	V1,V2,159,130,1	test instruction
00001A92	E710 8F10 000E		00001110	1402+	VST	V1,V10UTPUT	save result
00001A98	B98D 0020			1403+	EPSW	R2,R0	exptract psw
00001A9C	5020 8EF4		000010F4	1404+	ST	R2,CCPSW	to save CC
00001AA0	07FB			1405+	BR	R11	return
00001AA4				1406+RE23	DC	0F	
00001AA4				1407+	DROP	R5	
00001AA4	00000000 00000000			1408	DC	XL16'00000000000000000000220000000D'	V1
00001AAC	00000022 0000000D						
00001AB4	00000000 00000000			1409	DC	XL16'00000000000000000000220000000B'	V2
00001ABC	00000022 0000000B						
				1410			
				1411	VRI_G	VPSOP,159,192,1,1	nz=1 pc=0
00001AC8				1412+	DS	0FD	
00001AC8		00001AC8		1413+	USING	*,R5	base for test data and test routine
00001AC8	00001AE8			1414+T24	DC	A(X24)	address of test routine
00001ACC	0018			1415+	DC	H'24'	test number
00001ACE	00			1416+	DC	X'00'	

```
  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

00001ACF  9F                                        1417+        DC       HL1'159'            i3
00001AD0  C0                                        1418+        DC       HL1'192'            i4
00001AD1  01                                        1419+        DC       HL1'1'              m5
00001AD2  01                                        1420+        DC       HL1'1'              cc
00001AD3  0B                                        1421+        DC       HL1'11'             cc failed mask
00001AD4  00001B1C                                  1422+V2_24   DC       A(RE24+16)          address of v2: 16-byte packed decimal
00001AD8  E5D7E2D6 D7404040                         1423+        DC       CL8'VPSOP'          instruction name
00001AE0  00000010                                  1424+        DC       A(16)               result length
00001AE4  00001B0C                                  1425+REA24   DC       A(RE24)             result address
                                                    1426+*                                   INSTRUCTION UNDER TEST ROUTINE
00001AE8                                            1427+X24     DS       0F
00001AE8  E320 500C 0014              00001AD4      1428+        LGF      R2,V2_24            get v2
00001AEE  E722 0000 0006              00000000      1429+        VL       V2,0(R2)
00001AF4  E612 C019 F05B                            1430+        VPSOP    V1,V2,159,192,1       test instruction
00001AFA  E710 8F10 000E              00001110      1431+        VST      V1,V10UTPUT         save result
00001B00  B98D 0020                                 1432+        EPSW     R2,R0              exptract psw
00001B04  5020 8EF4                   000010F4      1433+        ST       R2,CCPSW                to save CC
00001B08  07FB                                      1434+        BR       R11                return
00001B0C                                            1435+RE24    DC       0F
00001B0C                                            1436+        DROP     R5
00001B0C  00000000 00000000                         1437         DC       XL16'00000000000000000000220000000D'     V1
00001B14  00000022 0000000D
00001B1C  00000000 00000000                         1438         DC       XL16'00000000000000000000220000000B'     V2
00001B24  00000022 0000000B

                                                    1439
                                                    1440         VRI_G  VPSOP,159,194,1,1           nz=1  pc=1
00001B30                                            1441+        DS     0FD
00001B30                    00001B30                1442+        USING  *,R5                base for test data and test routine
00001B30  00001B50                                  1443+T25     DC       A(X25)              address of test routine
00001B34  0019                                      1444+        DC       H'25'               test number
00001B36  00                                        1445+        DC       X'00'
00001B37  9F                                        1446+        DC       HL1'159'            i3
00001B38  C2                                        1447+        DC       HL1'194'            i4
00001B39  01                                        1448+        DC       HL1'1'              m5
00001B3A  01                                        1449+        DC       HL1'1'              cc
00001B3B  0B                                        1450+        DC       HL1'11'             cc failed mask
00001B3C  00001B84                                  1451+V2_25   DC       A(RE25+16)          address of v2: 16-byte packed decimal
00001B40  E5D7E2D6 D7404040                         1452+        DC       CL8'VPSOP'          instruction name
00001B48  00000010                                  1453+        DC       A(16)               result length
00001B4C  00001B74                                  1454+REA25   DC       A(RE25)             result address
                                                    1455+*                                   INSTRUCTION UNDER TEST ROUTINE
00001B50                                            1456+X25     DS       0F
00001B50  E320 500C 0014              00001B3C      1457+        LGF      R2,V2_25            get v2
00001B56  E722 0000 0006              00000000      1458+        VL       V2,0(R2)
00001B5C  E612 C219 F05B                            1459+        VPSOP    V1,V2,159,194,1       test instruction
00001B62  E710 8F10 000E              00001110      1460+        VST      V1,V10UTPUT         save result
00001B68  B98D 0020                                 1461+        EPSW     R2,R0              exptract psw
00001B6C  5020 8EF4                   000010F4      1462+        ST       R2,CCPSW                to save CC
00001B70  07FB                                      1463+        BR       R11                return
00001B74                                            1464+RE25    DC       0F
00001B74                                            1465+        DROP     R5
00001B74  00000000 00000000                         1466         DC       XL16'00000000000000000000220000000D'     V1
00001B7C  00000022 0000000D
00001B84  00000000 00000000                         1467         DC       XL16'00000000000000000000220000000B'     V2
00001B8C  00000022 0000000B
                                                    1468
```

```
  LOC         OBJECT CODE      ADDR1     ADDR2     STMT

                                                  1469 * V1:nonzero V2:invalid   PC='-' NZ='â€"'            V1_sign=V2  CC=2
                                                  1470           VRI_G VPSOP, 159, 128, 1, 2          nz=0  pc=0
00001B98                                          1471+          DS    0FD
00001B98                       00001B98           1472+          USING *, R5                base for test data and test routine
00001B98    00001BB8                              1473+T26       DC    A(X26)               address of test routine
00001B9C    001A                                  1474+          DC    H'26'                test number
00001B9E    00                                    1475+          DC    X'00'
00001B9F    9F                                    1476+          DC    HL1'159'             i3
00001BA0    80                                    1477+          DC    HL1'128'             i4
00001BA1    01                                    1478+          DC    HL1'1'               m5
00001BA2    02                                    1479+          DC    HL1'2'               cc
00001BA3    0D                                    1480+          DC    HL1'13'              cc failed mask
00001BA4    00001BEC                              1481+V2_26     DC    A(RE26+16)           address of v2: 16-byte packed decimal
00001BA8    E5D7E2D6 D7404040                      1482+          DC    CL8'VPSOP'           instruction name
00001BB0    00000010                              1483+          DC    A(16)                result length
00001BB4    00001BDC                              1484+REA26     DC    A(RE26)              result address
                                                  1485+*                                   INSTRUCTION UNDER TEST ROUTINE
00001BB8                                          1486+X26       DS    0F
00001BB8    E320 500C 0014     00001BA4           1487+          LGF   R2, V2_26            get v2
00001BBE    E722 0000 0006     00000000           1488+          VL    V2, 0(R2)
00001BC4    E612 8019 F05B                         1489+          VPSOP V1, V2, 159, 128, 1   test instruction
00001BCA    E710 8F10 000E     00001110           1490+          VST   V1, V10UTPUT         save result
00001BD0    B98D 0020                              1491+          EPSW  R2, R0               exptract psw
00001BD4    5020 8EF4          000010F4           1492+          ST    R2, CCPSW               to save CC
00001BD8    07FB                                   1493+          BR    R11                  return
00001BDC                                          1494+RE26      DC    0F
00001BDC                                          1495+          DROP  R5
00001BDC    00000000 00000000                      1496           DC    XL16'00000000000000000000002200000009'      V1
00001BE4    00000022 00000009
00001BEC    00000000 00000000                      1497           DC    XL16'00000000000000000000002200000009'      V2
00001BF4    00000022 00000009

                                                  1498
                                                  1499           VRI_G VPSOP, 159, 130, 1, 2          nz=0  pc=1
00001C00                                          1500+          DS    0FD
00001C00                       00001C00           1501+          USING *, R5                base for test data and test routine
00001C00    00001C20                              1502+T27       DC    A(X27)               address of test routine
00001C04    001B                                  1503+          DC    H'27'                test number
00001C06    00                                    1504+          DC    X'00'
00001C07    9F                                    1505+          DC    HL1'159'             i3
00001C08    82                                    1506+          DC    HL1'130'             i4
00001C09    01                                    1507+          DC    HL1'1'               m5
00001C0A    02                                    1508+          DC    HL1'2'               cc
00001C0B    0D                                    1509+          DC    HL1'13'              cc failed mask
00001C0C    00001C54                              1510+V2_27     DC    A(RE27+16)           address of v2: 16-byte packed decimal
00001C10    E5D7E2D6 D7404040                      1511+          DC    CL8'VPSOP'           instruction name
00001C18    00000010                              1512+          DC    A(16)                result length
00001C1C    00001C44                              1513+REA27     DC    A(RE27)              result address
                                                  1514+*                                   INSTRUCTION UNDER TEST ROUTINE
00001C20                                          1515+X27       DS    0F
00001C20    E320 500C 0014     00001C0C           1516+          LGF   R2, V2_27            get v2
00001C26    E722 0000 0006     00000000           1517+          VL    V2, 0(R2)
00001C2C    E612 8219 F05B                         1518+          VPSOP V1, V2, 159, 130, 1   test instruction
00001C32    E710 8F10 000E     00001110           1519+          VST   V1, V10UTPUT         save result
00001C38    B98D 0020                              1520+          EPSW  R2, R0               exptract psw
00001C3C    5020 8EF4          000010F4           1521+          ST    R2, CCPSW               to save CC
00001C40    07FB                                   1522+          BR    R11                  return
```

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  LOC         OBJECT CODE      ADDR1      ADDR2     STMT

00001C44                                           1523+RE27     DC     0F
00001C44                                           1524+         DROP   R5
00001C44    00000000 00000000                      1525          DC     XL16'00000000000000000000002200000009'      V1
00001C4C    00000022 00000009
00001C54    00000000 00000000                      1526          DC     XL16'00000000000000000000002200000009'      V2
00001C5C    00000022 00000009
                                                   1527
                                                   1528          VRI_G  VPSOP,159,192,1,2            nz=1   pc=0
00001C68                                           1529+         DS     0FD
00001C68                          00001C68         1530+         USING  *,R5                   base for test data and test routine
00001C68    00001C88                               1531+T28      DC     A(X28)                 address of test routine
00001C6C    001C                                   1532+         DC     H'28'                  test number
00001C6E    00                                     1533+         DC     X'00'
00001C6F    9F                                      1534+         DC     HL1'159'               i3
00001C70    C0                                      1535+         DC     HL1'192'               i4
00001C71    01                                      1536+         DC     HL1'1'                 m5
00001C72    02                                      1537+         DC     HL1'2'                 cc
00001C73    0D                                      1538+         DC     HL1'13'                cc failed mask
00001C74    00001CBC                                1539+V2_28    DC     A(RE28+16)             address of v2: 16-byte packed decimal
00001C78    E5D7E2D6 D7404040                       1540+         DC     CL8'VPSOP'             instruction name
00001C80    00000010                                1541+         DC     A(16)                  result length
00001C84    00001CAC                                1542+REA28    DC     A(RE28)                result address
                                                   1543+*                                      INSTRUCTION UNDER TEST ROUTINE
00001C88                                           1544+X28      DS     0F
00001C88    E320 500C 0014             00001C74     1545+         LGF    R2,V2_28               get v2
00001C8E    E722 0000 0006             00000000     1546+         VL     V2,0(R2)
00001C94    E612 C019 F05B                          1547+         VPSOP  V1,V2,159,192,1         test instruction
00001C9A    E710 8F10 000E             00001110     1548+         VST    V1,V10UTPUT            save result
00001CA0    B98D 0020                               1549+         EPSW   R2,R0                  exptract psw
00001CA4    5020 8EF4                  000010F4     1550+         ST     R2,CCPSW                       to save CC
00001CA8    07FB                                    1551+         BR     R11                   return
00001CAC                                            1552+RE28     DC     0F
00001CAC                                            1553+         DROP   R5
00001CAC    00000000 00000000                       1554          DC     XL16'00000000000000000000002200000009'      V1
00001CB4    00000022 00000009
00001CBC    00000000 00000000                       1555          DC     XL16'00000000000000000000002200000009'      V2
00001CC4    00000022 00000009
                                                   1556
                                                   1557          VRI_G  VPSOP,159,194,1,2            nz=1   pc=1
00001CD0                                           1558+         DS     0FD
00001CD0                          00001CD0         1559+         USING  *,R5                   base for test data and test routine
00001CD0    00001CF0                               1560+T29      DC     A(X29)                 address of test routine
00001CD4    001D                                   1561+         DC     H'29'                  test number
00001CD6    00                                     1562+         DC     X'00'
00001CD7    9F                                      1563+         DC     HL1'159'               i3
00001CD8    C2                                      1564+         DC     HL1'194'               i4
00001CD9    01                                      1565+         DC     HL1'1'                 m5
00001CDA    02                                      1566+         DC     HL1'2'                 cc
00001CDB    0D                                      1567+         DC     HL1'13'                cc failed mask
00001CDC    00001D24                                1568+V2_29    DC     A(RE29+16)             address of v2: 16-byte packed decimal
00001CE0    E5D7E2D6 D7404040                       1569+         DC     CL8'VPSOP'             instruction name
00001CE8    00000010                                1570+         DC     A(16)                  result length
00001CEC    00001D14                                1571+REA29    DC     A(RE29)                result address
                                                   1572+*                                      INSTRUCTION UNDER TEST ROUTINE
00001CF0                                           1573+X29      DS     0F
00001CF0    E320 500C 0014             00001CDC     1574+         LGF    R2,V2_29               get v2
```

```
  LOC           OBJECT CODE      ADDR1     ADDR2     STMT

00001CF6  E722 0000 0006                   00000000  1575+              VL    V2,0(R2)
00001CFC  E612 C219 F05B                             1576+              VPSOP V1,V2,159,194,1     test instruction
00001D02  E710 8F10 000E                   00001110  1577+              VST   V1,V10UTPUT         save result
00001D08  B98D 0020                                  1578+              EPSW  R2,R0              exptract psw
00001D0C  5020 8EF4                        000010F4  1579+              ST    R2,CCPSW                to save CC
00001D10  07FB                                       1580+              BR    R11                return
00001D14                                             1581+RE29          DC    0F
00001D14                                             1582+              DROP  R5
00001D14  00000000 00000000                          1583               DC    XL16'00000000000000000000002200000009'    V1
00001D1C  00000022 00000009
00001D24  00000000 00000000                          1584               DC    XL16'00000000000000000000002200000009'    V2
00001D2C  00000022 00000009
                                                     1585
                                                     1586 * V1:zero  V2:positive    PC='0' NZ='â€"'                    V1_sign=C  CC=0
                                                     1587               VRI_G VPSOP,159,128,1,0            nz=0  pc=0
00001D38                                             1588+              DS    0FD
00001D38                          00001D38           1589+              USING *,R5                  base for test data and test routine
00001D38  00001D58                                   1590+T30          DC    A(X30)                 address of test routine
00001D3C  001E                                       1591+              DC    H'30'                  test number
00001D3E  00                                         1592+              DC    X'00'
00001D3F  9F                                         1593+              DC    HL1'159'               i3
00001D40  80                                         1594+              DC    HL1'128'               i4
00001D41  01                                         1595+              DC    HL1'1'                 m5
00001D42  00                                         1596+              DC    HL1'0'                 cc
00001D43  07                                         1597+              DC    HL1'7'                 cc failed mask
00001D44  00001D8C                                   1598+V2_30         DC    A(RE30+16)             address of v2: 16-byte packed decimal
00001D48  E5D7E2D6 D7404040                           1599+              DC    CL8'VPSOP'             instruction name
00001D50  00000010                                   1600+              DC    A(16)                  result length
00001D54  00001D7C                                   1601+REA30         DC    A(RE30)                result address
                                                     1602+*                                        INSTRUCTION UNDER TEST ROUTINE
00001D58                                             1603+X30          DS    0F
00001D58  E320 500C 0014                   00001D44  1604+              LGF   R2,V2_30               get v2
00001D5E  E722 0000 0006                   00000000  1605+              VL    V2,0(R2)
00001D64  E612 8019 F05B                             1606+              VPSOP V1,V2,159,128,1     test instruction
00001D6A  E710 8F10 000E                   00001110  1607+              VST   V1,V10UTPUT         save result
00001D70  B98D 0020                                  1608+              EPSW  R2,R0              exptract psw
00001D74  5020 8EF4                        000010F4  1609+              ST    R2,CCPSW                to save CC
00001D78  07FB                                       1610+              BR    R11                return
00001D7C                                             1611+RE30          DC    0F
00001D7C                                             1612+              DROP  R5
00001D7C  00000000 00000000                          1613               DC    XL16'0000000000000000000000000000000C'    V1
00001D84  00000000 0000000C
00001D8C  00000000 00000000                          1614               DC    XL16'0000000000000000000000000000000F'    V2
00001D94  00000000 0000000F
                                                     1615
                                                     1616               VRI_G VPSOP,159,192,1,0            nz=1  pc=0
00001DA0                                             1617+              DS    0FD
00001DA0                          00001DA0           1618+              USING *,R5                  base for test data and test routine
00001DA0  00001DC0                                   1619+T31          DC    A(X31)                 address of test routine
00001DA4  001F                                       1620+              DC    H'31'                  test number
00001DA6  00                                         1621+              DC    X'00'
00001DA7  9F                                         1622+              DC    HL1'159'               i3
00001DA8  C0                                         1623+              DC    HL1'192'               i4
00001DA9  01                                         1624+              DC    HL1'1'                 m5
00001DAA  00                                         1625+              DC    HL1'0'                 cc
00001DAB  07                                         1626+              DC    HL1'7'                 cc failed mask
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

00001DAC  00001DF4                                1627+V2_31    DC     A(RE31+16)              address of v2: 16-byte packed decimal
00001DB0  E5D7E2D6 D7404040                        1628+         DC     CL8'VPSOP'              instruction name
00001DB8  00000010                                1629+         DC     A(16)                   result length
00001DBC  00001DE4                                1630+REA31     DC     A(RE31)                 result address
                                                  1631+*                                       INSTRUCTION UNDER TEST ROUTINE
00001DC0                                          1632+X31       DS     0F
00001DC0  E320 500C 0014               00001DAC   1633+          LGF    R2,V2_31                get v2
00001DC6  E722 0000 0006               00000000   1634+          VL     V2,0(R2)
00001DCC  E612 C019 F05B                          1635+          VPSOP  V1,V2,159,192,1          test instruction
00001DD2  E710 8F10 000E               00001110   1636+          VST    V1,V10UTPUT             save result
00001DD8  B98D 0020                               1637+          EPSW   R2,R0                   exptract psw
00001DDC  5020 8EF4                    000010F4   1638+          ST     R2,CCPSW                   to save CC
00001DE0  07FB                                    1639+          BR     R11                     return
00001DE4                                          1640+RE31      DC     0F
00001DE4                                          1641+          DROP   R5
00001DE4  00000000 00000000                        1642          DC     XL16'0000000000000000000000000000000C'     V1
00001DEC  00000000 0000000C
00001DF4  00000000 00000000                        1643          DC     XL16'0000000000000000000000000000000F'     V2
00001DFC  00000000 0000000F

                                                  1644
                                                  1645 * V1:zero  V2:positive   PC='1' NZ='€"'                       V1_sign=F  CC=0
                                                  1646         VRI_G VPSOP,159,130,1,0            nz=0  pc=1
00001E08                                          1647+          DS     0FD
00001E08                      00001E08            1648+          USING  *,R5                    base for test data and test routine
00001E08  00001E28                                1649+T32       DC     A(X32)                  address of test routine
00001E0C  0020                                    1650+          DC     H'32'                   test number
00001E0E  00                                      1651+          DC     X'00'
00001E0F  9F                                      1652+          DC     HL1'159'                i3
00001E10  82                                      1653+          DC     HL1'130'                i4
00001E11  01                                      1654+          DC     HL1'1'                  m5
00001E12  00                                      1655+          DC     HL1'0'                  cc
00001E13  07                                      1656+          DC     HL1'7'                  cc failed mask
00001E14  00001E5C                                1657+V2_32     DC     A(RE32+16)              address of v2: 16-byte packed decimal
00001E18  E5D7E2D6 D7404040                        1658+         DC     CL8'VPSOP'              instruction name
00001E20  00000010                                1659+         DC     A(16)                   result length
00001E24  00001E4C                                1660+REA32     DC     A(RE32)                 result address
                                                  1661+*                                       INSTRUCTION UNDER TEST ROUTINE
00001E28                                          1662+X32       DS     0F
00001E28  E320 500C 0014               00001E14   1663+          LGF    R2,V2_32                get v2
00001E2E  E722 0000 0006               00000000   1664+          VL     V2,0(R2)
00001E34  E612 8219 F05B                          1665+          VPSOP  V1,V2,159,130,1          test instruction
00001E3A  E710 8F10 000E               00001110   1666+          VST    V1,V10UTPUT             save result
00001E40  B98D 0020                               1667+          EPSW   R2,R0                   exptract psw
00001E44  5020 8EF4                    000010F4   1668+          ST     R2,CCPSW                   to save CC
00001E48  07FB                                    1669+          BR     R11                     return
00001E4C                                          1670+RE32      DC     0F
00001E4C                                          1671+          DROP   R5
00001E4C  00000000 00000000                        1672          DC     XL16'0000000000000000000000000000000F'     V1
00001E54  00000000 0000000F
00001E5C  00000000 00000000                        1673          DC     XL16'0000000000000000000000000000000C'     V2
00001E64  00000000 0000000C

                                                  1674
                                                  1675         VRI_G VPSOP,159,194,1,0            nz=1  pc=1
00001E70                                          1676+          DS     0FD
00001E70                      00001E70            1677+          USING  *,R5                    base for test data and test routine
00001E70  00001E90                                1678+T33       DC     A(X33)                  address of test routine
```

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  LOC           OBJECT CODE      ADDR1      ADDR2     STMT

00001E74  0021                                        1679+         DC     H'33'             test number
00001E76  00                                          1680+         DC     X'00'
00001E77  9F                                          1681+         DC     HL1'159'          i3
00001E78  C2                                          1682+         DC     HL1'194'          i4
00001E79  01                                          1683+         DC     HL1'1'            m5
00001E7A  00                                          1684+         DC     HL1'0'            cc
00001E7B  07                                          1685+         DC     HL1'7'            cc failed mask
00001E7C  00001EC4                                    1686+V2_33    DC     A(RE33+16)        address of v2: 16-byte packed decimal
00001E80  E5D7E2D6 D7404040                           1687+         DC     CL8'VPSOP'        instruction name
00001E88  00000010                                    1688+         DC     A(16)             result length
00001E8C  00001EB4                                    1689+REA33    DC     A(RE33)           result address
                                                      1690+*                                 INSTRUCTION UNDER TEST ROUTINE
00001E90                                              1691+X33      DS     0F
00001E90  E320 500C 0014                   00001E7C   1692+         LGF    R2,V2_33          get v2
00001E96  E722 0000 0006                   00000000   1693+         VL     V2,0(R2)
00001E9C  E612 C219 F05B                              1694+         VPSOP  V1,V2,159,194,1    test instruction
00001EA2  E710 8F10 000E                   00001110   1695+         VST    V1,V10UTPUT       save result
00001EA8  B98D 0020                                   1696+         EPSW   R2,R0             exptract psw
00001EAC  5020 8EF4                        000010F4   1697+         ST     R2,CCPSW              to save CC
00001EB0  07FB                                        1698+         BR     R11               return
00001EB4                                              1699+RE33     DC     0F
00001EB4                                              1700+         DROP   R5
00001EB4  00000000 00000000                           1701          DC     XL16'000000000000000000000000000000000F'      V1
00001EBC  00000000 0000000F
00001EC4  00000000 00000000                           1702          DC     XL16'0000000000000000000000000000000000C'     V2
00001ECC  00000000 0000000C

                                                      1703
                                                      1704 * V1:zero  V2:negative    PC='0' NZ='0'              V1_sign=C  CC=0
                                                      1705          VRI_G  VPSOP,159,128,1,0        nz=0   pc=0
00001ED8                                              1706+         DS     0FD
00001ED8                         00001ED8             1707+         USING  *,R5              base for test data and test routine
00001ED8  00001EF8                                    1708+T34      DC     A(X34)            address of test routine
00001EDC  0022                                        1709+         DC     H'34'             test number
00001EDE  00                                          1710+         DC     X'00'
00001EDF  9F                                          1711+         DC     HL1'159'          i3
00001EE0  80                                          1712+         DC     HL1'128'          i4
00001EE1  01                                          1713+         DC     HL1'1'            m5
00001EE2  00                                          1714+         DC     HL1'0'            cc
00001EE3  07                                          1715+         DC     HL1'7'            cc failed mask
00001EE4  00001F2C                                    1716+V2_34    DC     A(RE34+16)        address of v2: 16-byte packed decimal
00001EE8  E5D7E2D6 D7404040                           1717+         DC     CL8'VPSOP'        instruction name
00001EF0  00000010                                    1718+         DC     A(16)             result length
00001EF4  00001F1C                                    1719+REA34    DC     A(RE34)           result address
                                                      1720+*                                 INSTRUCTION UNDER TEST ROUTINE
00001EF8                                              1721+X34      DS     0F
00001EF8  E320 500C 0014                   00001EE4   1722+         LGF    R2,V2_34          get v2
00001EFE  E722 0000 0006                   00000000   1723+         VL     V2,0(R2)
00001F04  E612 8019 F05B                              1724+         VPSOP  V1,V2,159,128,1    test instruction
00001F0A  E710 8F10 000E                   00001110   1725+         VST    V1,V10UTPUT       save result
00001F10  B98D 0020                                   1726+         EPSW   R2,R0             exptract psw
00001F14  5020 8EF4                        000010F4   1727+         ST     R2,CCPSW              to save CC
00001F18  07FB                                        1728+         BR     R11               return
00001F1C                                              1729+RE34     DC     0F
00001F1C                                              1730+         DROP   R5
00001F1C  00000000 00000000                           1731          DC     XL16'0000000000000000000000000000000000C'     V1
00001F24  00000000 0000000C
```

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  LOC          OBJECT CODE       ADDR1      ADDR2      STMT

00001F2C  00000000 00000000                           1732          DC     XL16'00000000000000000000000000000000D'      V2
00001F34  00000000 0000000D

                                                       1733
                                                       1734  * V1:zero  V2:negative    PC='1' NZ='0'                V1_sign=F  CC=0
                                                       1735          VRI_G VPSOP,159,130,1,0           nz=0  pc=1
00001F40                                               1736+         DS     0FD
00001F40                           00001F40            1737+         USING *,R5                        base for test data and test routine
00001F40  00001F60                                     1738+T35      DC     A(X35)                      address of test routine
00001F44  0023                                         1739+         DC     H'35'                       test number
00001F46  00                                           1740+         DC     X'00'
00001F47  9F                                           1741+         DC     HL1'159'                    i3
00001F48  82                                           1742+         DC     HL1'130'                    i4
00001F49  01                                           1743+         DC     HL1'1'                      m5
00001F4A  00                                           1744+         DC     HL1'0'                      cc
00001F4B  07                                           1745+         DC     HL1'7'                      cc failed mask
00001F4C  00001F94                                     1746+V2_35    DC     A(RE35+16)                  address of v2: 16-byte packed decimal
00001F50  E5D7E2D6 D7404040                            1747+         DC     CL8'VPSOP'                  instruction name
00001F58  00000010                                     1748+         DC     A(16)                       result length
00001F5C  00001F84                                     1749+REA35    DC     A(RE35)                     result address
                                                       1750+*                                           INSTRUCTION UNDER TEST ROUTINE
00001F60                                               1751+X35      DS     0F
00001F60  E320 500C 0014               00001F4C        1752+         LGF    R2,V2_35                    get v2
00001F66  E722 0000 0006               00000000        1753+         VL     V2,0(R2)
00001F6C  E612 8219 F05B                               1754+         VPSOP  V1,V2,159,130,1    test instruction
00001F72  E710 8F10 000E               00001110        1755+         VST    V1,V10UTPUT                 save result
00001F78  B98D 0020                                    1756+         EPSW   R2,R0                       exptract psw
00001F7C  5020 8EF4                    000010F4        1757+         ST     R2,CCPSW                        to save CC
00001F80  07FB                                         1758+         BR     R11                         return
00001F84                                               1759+RE35     DC     0F
00001F84                                               1760+         DROP   R5
00001F84  00000000 00000000                            1761          DC     XL16'0000000000000000000000000000000F'      V1
00001F8C  00000000 0000000F
00001F94  00000000 00000000                            1762          DC     XL16'00000000000000000000000000000000D'      V2
00001F9C  00000000 0000000D

                                                       1763
                                                       1764  * V1:zero  V2:negative    PC='-' NZ='1'                V1_sign=D  CC=0
                                                       1765          VRI_G VPSOP,159,192,1,0           nz=1  pc=0
00001FA8                                               1766+         DS     0FD
00001FA8                           00001FA8            1767+         USING *,R5                        base for test data and test routine
00001FA8  00001FC8                                     1768+T36      DC     A(X36)                      address of test routine
00001FAC  0024                                         1769+         DC     H'36'                       test number
00001FAE  00                                           1770+         DC     X'00'
00001FAF  9F                                           1771+         DC     HL1'159'                    i3
00001FB0  C0                                           1772+         DC     HL1'192'                    i4
00001FB1  01                                           1773+         DC     HL1'1'                      m5
00001FB2  00                                           1774+         DC     HL1'0'                      cc
00001FB3  07                                           1775+         DC     HL1'7'                      cc failed mask
00001FB4  00001FFC                                     1776+V2_36    DC     A(RE36+16)                  address of v2: 16-byte packed decimal
00001FB8  E5D7E2D6 D7404040                            1777+         DC     CL8'VPSOP'                  instruction name
00001FC0  00000010                                     1778+         DC     A(16)                       result length
00001FC4  00001FEC                                     1779+REA36    DC     A(RE36)                     result address
                                                       1780+*                                           INSTRUCTION UNDER TEST ROUTINE
00001FC8                                               1781+X36      DS     0F
00001FC8  E320 500C 0014               00001FB4        1782+         LGF    R2,V2_36                    get v2
00001FCE  E722 0000 0006               00000000        1783+         VL     V2,0(R2)
00001FD4  E612 C019 F05B                               1784+         VPSOP  V1,V2,159,192,1    test instruction
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
00001FDA	E710 8F10 000E		00001110	1785+	VST	V1,V10UTPUT	save result
00001FE0	B98D 0020			1786+	EPSW	R2,R0	exptract psw
00001FE4	5020 8EF4		000010F4	1787+	ST	R2,CCPSW	to save CC
00001FE8	07FB			1788+	BR	R11	return
00001FEC				1789+RE36	DC	0F	
00001FEC				1790+	DROP	R5	
00001FEC	00000000 00000000			1791	DC	XL16'0000000000000000000000000000000D'	V1
00001FF4	00000000 0000000D						
00001FFC	00000000 00000000			1792	DC	XL16'0000000000000000000000000000000B'	V2
00002004	00000000 0000000B						
				1793			
				1794	VRI_G VPSOP,159,194,1,0 nz=1 pc=1		
00002010				1795+	DS	0FD	
00002010			00002010	1796+	USING	*,R5	base for test data and test routine
00002010	00002030			1797+T37	DC	A(X37)	address of test routine
00002014	0025			1798+	DC	H'37'	test number
00002016	00			1799+	DC	X'00'	
00002017	9F			1800+	DC	HL1'159'	i3
00002018	C2			1801+	DC	HL1'194'	i4
00002019	01			1802+	DC	HL1'1'	m5
0000201A	00			1803+	DC	HL1'0'	cc
0000201B	07			1804+	DC	HL1'7'	cc failed mask
0000201C	00002064			1805+V2_37	DC	A(RE37+16)	address of v2: 16-byte packed decimal
00002020	E5D7E2D6 D7404040			1806+	DC	CL8'VPSOP'	instruction name
00002028	00000010			1807+	DC	A(16)	result length
0000202C	00002054			1808+REA37	DC	A(RE37)	result address
				1809+*			INSTRUCTION UNDER TEST ROUTINE
00002030				1810+X37	DS	0F	
00002030	E320 500C 0014		0000201C	1811+	LGF	R2,V2_37	get v2
00002036	E722 0000 0006		00000000	1812+	VL	V2,0(R2)	
0000203C	E612 C219 F05B			1813+	VPSOP	V1,V2,159,194,1	test instruction
00002042	E710 8F10 000E		00001110	1814+	VST	V1,V10UTPUT	save result
00002048	B98D 0020			1815+	EPSW	R2,R0	exptract psw
0000204C	5020 8EF4		000010F4	1816+	ST	R2,CCPSW	to save CC
00002050	07FB			1817+	BR	R11	return
00002054				1818+RE37	DC	0F	
00002054				1819+	DROP	R5	
00002054	00000000 00000000			1820	DC	XL16'0000000000000000000000000000000D'	V1
0000205C	00000000 0000000D						
00002064	00000000 00000000			1821	DC	XL16'0000000000000000000000000000000B'	V2
0000206C	00000000 0000000B						
				1822			
				1823 * V1:zero V2:invalid PC='-' NZ='â€"' V1_sign=V2 CC=0		
				1824	VRI_G VPSOP,159,128,1,0 nz=0 pc=0		
00002078				1825+	DS	0FD	
00002078			00002078	1826+	USING	*,R5	base for test data and test routine
00002078	00002098			1827+T38	DC	A(X38)	address of test routine
0000207C	0026			1828+	DC	H'38'	test number
0000207E	00			1829+	DC	X'00'	
0000207F	9F			1830+	DC	HL1'159'	i3
00002080	80			1831+	DC	HL1'128'	i4
00002081	01			1832+	DC	HL1'1'	m5
00002082	00			1833+	DC	HL1'0'	cc
00002083	07			1834+	DC	HL1'7'	cc failed mask
00002084	000020CC			1835+V2_38	DC	A(RE38+16)	address of v2: 16-byte packed decimal
00002088	E5D7E2D6 D7404040			1836+	DC	CL8'VPSOP'	instruction name

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  LOC        OBJECT CODE      ADDR1      ADDR2      STMT

00002090   00000010                                 1837+          DC     A(16)              result length
00002094   000020BC                                 1838+REA38     DC     A(RE38)            result address
                                                    1839+*                                   INSTRUCTION UNDER TEST ROUTINE
00002098                                            1840+X38       DS     0F
00002098   E320 500C 0014              00002084      1841+         LGF    R2,V2_38           get v2
0000209E   E722 0000 0006              00000000      1842+         VL     V2,0(R2)
000020A4   E612 8019 F05B                            1843+         VPSOP  V1,V2,159,128,1     test instruction
000020AA   E710 8F10 000E              00001110      1844+         VST    V1,V10UTPUT        save result
000020B0   B98D 0020                                 1845+         EPSW   R2,R0              exptract psw
000020B4   5020 8EF4                   000010F4      1846+         ST     R2,CCPSW              to save CC
000020B8   07FB                                      1847+         BR     R11                return
000020BC                                             1848+RE38     DC     0F
000020BC                                             1849+         DROP   R5
000020BC   00000000 00000000                         1850          DC     XL16'00000000000000000000000000000009'      V1
000020C4   00000000 00000009
000020CC   00000000 00000000                         1851          DC     XL16'00000000000000000000000000000009'      V2
000020D4   00000000 00000009

                                                    1852
                                                    1853          VRI_G VPSOP,159,130,1,0          nz=0  pc=1
000020E0                                             1854+         DS     0FD
000020E0                          000020E0           1855+         USING *,R5                base for test data and test routine
000020E0   00002100                                 1856+T39       DC     A(X39)             address of test routine
000020E4   0027                                      1857+         DC     H'39'              test number
000020E6   00                                        1858+         DC     X'00'
000020E7   9F                                        1859+         DC     HL1'159'           i3
000020E8   82                                        1860+         DC     HL1'130'           i4
000020E9   01                                        1861+         DC     HL1'1'             m5
000020EA   00                                        1862+         DC     HL1'0'             cc
000020EB   07                                        1863+         DC     HL1'7'             cc failed mask
000020EC   00002134                                 1864+V2_39     DC     A(RE39+16)         address of v2: 16-byte packed decimal
000020F0   E5D7E2D6 D7404040                         1865+         DC     CL8'VPSOP'         instruction name
000020F8   00000010                                 1866+         DC     A(16)              result length
000020FC   00002124                                 1867+REA39     DC     A(RE39)            result address
                                                    1868+*                                   INSTRUCTION UNDER TEST ROUTINE
00002100                                             1869+X39       DS     0F
00002100   E320 500C 0014              000020EC      1870+         LGF    R2,V2_39           get v2
00002106   E722 0000 0006              00000000      1871+         VL     V2,0(R2)
0000210C   E612 8219 F05B                            1872+         VPSOP  V1,V2,159,130,1     test instruction
00002112   E710 8F10 000E              00001110      1873+         VST    V1,V10UTPUT        save result
00002118   B98D 0020                                 1874+         EPSW   R2,R0              exptract psw
0000211C   5020 8EF4                   000010F4      1875+         ST     R2,CCPSW              to save CC
00002120   07FB                                      1876+         BR     R11                return
00002124                                             1877+RE39     DC     0F
00002124                                             1878+         DROP   R5
00002124   00000000 00000000                         1879          DC     XL16'00000000000000000000000000000009'      V1
0000212C   00000000 00000009
00002134   00000000 00000000                         1880          DC     XL16'00000000000000000000000000000009'      V2
0000213C   00000000 00000009

                                                    1881
                                                    1882          VRI_G VPSOP,159,192,1,0          nz=1  pc=0
00002148                                             1883+         DS     0FD
00002148                          00002148           1884+         USING *,R5                base for test data and test routine
00002148   00002168                                 1885+T40       DC     A(X40)             address of test routine
0000214C   0028                                      1886+         DC     H'40'              test number
0000214E   00                                        1887+         DC     X'00'
0000214F   9F                                        1888+         DC     HL1'159'           i3
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  LOC         OBJECT CODE       ADDR1     ADDR2     STMT

00002150  C0                                        1889+       DC     HL1'192'              i4
00002151  01                                        1890+       DC     HL1'1'               m5
00002152  00                                        1891+       DC     HL1'0'               cc
00002153  07                                        1892+       DC     HL1'7'               cc failed mask
00002154  0000219C                                  1893+V2_40   DC     A(RE40+16)           address of v2: 16-byte packed decimal
00002158  E5D7E2D6 D7404040                         1894+       DC     CL8'VPSOP'           instruction name
00002160  00000010                                  1895+       DC     A(16)                result length
00002164  0000218C                                  1896+REA40   DC     A(RE40)              result address
                                                    1897+*                                  INSTRUCTION UNDER TEST ROUTINE
00002168                                            1898+X40     DS     0F
00002168  E320 500C 0014                00002154    1899+       LGF    R2,V2_40             get v2
0000216E  E722 0000 0006                00000000    1900+       VL     V2,0(R2)
00002174  E612 C019 F05B                            1901+       VPSOP  V1,V2,159,192,1       test instruction
0000217A  E710 8F10 000E                00001110    1902+       VST    V1,V1OUTPUT          save result
00002180  B98D 0020                                 1903+       EPSW   R2,R0                exptract psw
00002184  5020 8EF4                     000010F4    1904+       ST     R2,CCPSW                 to save CC
00002188  07FB                                      1905+       BR     R11                  return
0000218C                                            1906+RE40    DC     0F
0000218C                                            1907+       DROP   R5
0000218C  00000000 00000000                         1908        DC     XL16'00000000000000000000000000000009'      V1
00002194  00000000 00000009
0000219C  00000000 00000000                         1909        DC     XL16'00000000000000000000000000000009'      V2
000021A4  00000000 00000009

                                                    1910
                                                    1911        VRI_G  VPSOP,159,194,1,0           nz=1  pc=1
000021B0                                            1912+       DS     0FD
000021B0                000021B0                    1913+       USING  *,R5                 base for test data and test routine
000021B0  000021D0                                  1914+T41     DC     A(X41)               address of test routine
000021B4  0029                                      1915+       DC     H'41'                test number
000021B6  00                                        1916+       DC     X'00'
000021B7  9F                                        1917+       DC     HL1'159'             i3
000021B8  C2                                        1918+       DC     HL1'194'             i4
000021B9  01                                        1919+       DC     HL1'1'               m5
000021BA  00                                        1920+       DC     HL1'0'               cc
000021BB  07                                        1921+       DC     HL1'7'               cc failed mask
000021BC  00002204                                  1922+V2_41   DC     A(RE41+16)           address of v2: 16-byte packed decimal
000021C0  E5D7E2D6 D7404040                         1923+       DC     CL8'VPSOP'           instruction name
000021C8  00000010                                  1924+       DC     A(16)                result length
000021CC  000021F4                                  1925+REA41   DC     A(RE41)              result address
                                                    1926+*                                  INSTRUCTION UNDER TEST ROUTINE
000021D0                                            1927+X41     DS     0F
000021D0  E320 500C 0014                000021BC    1928+       LGF    R2,V2_41             get v2
000021D6  E722 0000 0006                00000000    1929+       VL     V2,0(R2)
000021DC  E612 C219 F05B                            1930+       VPSOP  V1,V2,159,194,1       test instruction
000021E2  E710 8F10 000E                00001110    1931+       VST    V1,V1OUTPUT          save result
000021E8  B98D 0020                                 1932+       EPSW   R2,R0                exptract psw
000021EC  5020 8EF4                     000010F4    1933+       ST     R2,CCPSW                 to save CC
000021F0  07FB                                      1934+       BR     R11                  return
000021F4                                            1935+RE41    DC     0F
000021F4                                            1936+       DROP   R5
000021F4  00000000 00000000                         1937        DC     XL16'00000000000000000000000000000009'      V1
000021FC  00000000 00000009
00002204  00000000 00000000                         1938        DC     XL16'00000000000000000000000000000009'      V2
0000220C  00000000 00000009

                                                    1939
                                                    1940 *-----------------------------------------------------
```

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  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

                                                    1941 * SC=01 (complement): nv=1 to avoid data exceptions
                                                    1942 *-------------------------------------------------
                                                    1943
                                                    1944 * V1:nonzero V2:positive    PC='-' NZ='â€"'                V1_sign=D  CC=1
                                                    1945          VRI_G VPSOP, 159, 132, 1, 1          nz=0  pc=0
00002218                                            1946+         DS    0FD
00002218                        00002218            1947+         USING *, R5                  base for test data and test routine
00002218  00002238                                  1948+T42      DC    A(X42)                 address of test routine
0000221C  002A                                      1949+         DC    H'42'                  test number
0000221E  00                                        1950+         DC    X'00'
0000221F  9F                                        1951+         DC    HL1'159'               i3
00002220  84                                        1952+         DC    HL1'132'               i4
00002221  01                                        1953+         DC    HL1'1'                 m5
00002222  01                                        1954+         DC    HL1'1'                 cc
00002223  0B                                        1955+         DC    HL1'11'                cc failed mask
00002224  0000226C                                  1956+V2_42    DC    A(RE42+16)             address of v2: 16-byte packed decimal
00002228  E5D7E2D6 D7404040                          1957+         DC    CL8'VPSOP'             instruction name
00002230  00000010                                  1958+         DC    A(16)                  result length
00002234  0000225C                                  1959+REA42    DC    A(RE42)                result address
                                                    1960+*                                     INSTRUCTION UNDER TEST ROUTINE
00002238                                            1961+X42      DS    0F
00002238  E320 500C 0014                  00002224  1962+         LGF   R2, V2_42              get v2
0000223E  E722 0000 0006                  00000000  1963+         VL    V2, 0(R2)
00002244  E612 8419 F05B                            1964+         VPSOP V1, V2, 159, 132, 1     test instruction
0000224A  E710 8F10 000E                  00001110  1965+         VST   V1, V10UTPUT           save result
00002250  B98D 0020                                 1966+         EPSW  R2, R0                 exptract psw
00002254  5020 8EF4                       000010F4  1967+         ST    R2, CCPSW                 to save CC
00002258  07FB                                      1968+         BR    R11                    return
0000225C                                            1969+RE42     DC    0F
0000225C                                            1970+         DROP  R5
0000225C  00000000 00000000                         1971          DC    XL16'0000000000000000000000220000000D'      V1
00002264  00000022 0000000D
0000226C  00000000 00000000                         1972          DC    XL16'0000000000000000000000220000000C'      V2
00002274  00000022 0000000C
                                                    1973
                                                    1974          VRI_G VPSOP, 159, 134, 1, 1          nz=0  pc=1
00002280                                            1975+         DS    0FD
00002280                        00002280            1976+         USING *, R5                  base for test data and test routine
00002280  000022A0                                  1977+T43      DC    A(X43)                 address of test routine
00002284  002B                                      1978+         DC    H'43'                  test number
00002286  00                                        1979+         DC    X'00'
00002287  9F                                        1980+         DC    HL1'159'               i3
00002288  86                                        1981+         DC    HL1'134'               i4
00002289  01                                        1982+         DC    HL1'1'                 m5
0000228A  01                                        1983+         DC    HL1'1'                 cc
0000228B  0B                                        1984+         DC    HL1'11'                cc failed mask
0000228C  000022D4                                  1985+V2_43    DC    A(RE43+16)             address of v2: 16-byte packed decimal
00002290  E5D7E2D6 D7404040                          1986+         DC    CL8'VPSOP'             instruction name
00002298  00000010                                  1987+         DC    A(16)                  result length
0000229C  000022C4                                  1988+REA43    DC    A(RE43)                result address
                                                    1989+*                                     INSTRUCTION UNDER TEST ROUTINE
000022A0                                            1990+X43      DS    0F
000022A0  E320 500C 0014                  0000228C  1991+         LGF   R2, V2_43              get v2
000022A6  E722 0000 0006                  00000000  1992+         VL    V2, 0(R2)
000022AC  E612 8619 F05B                            1993+         VPSOP V1, V2, 159, 134, 1     test instruction
000022B2  E710 8F10 000E                  00001110  1994+         VST   V1, V10UTPUT           save result
```

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  LOC           OBJECT CODE      ADDR1      ADDR2      STMT

000022B8  B98D 0020                                   1995+          EPSW  R2,R0              exptract psw
000022BC  5020 8EF4                        000010F4   1996+          ST    R2,CCPSW              to save CC
000022C0  07FB                                        1997+          BR    R11                return
000022C4                                              1998+RE43      DC    0F
000022C4                                              1999+          DROP  R5
000022C4  00000000 00000000                           2000           DC    XL16'0000000000000000000000220000000D'      V1
000022CC  00000022 0000000D
000022D4  00000000 00000000                           2001           DC    XL16'0000000000000000000000220000000A'      V2
000022DC  00000022 0000000A
                                                      2002
                                                      2003           VRI_G VPSOP,159,196,1,1          nz=1  pc=0
000022E8                                              2004+          DS    0FD
000022E8                           000022E8           2005+          USING *,R5                 base for test data and test routine
000022E8  00002308                                    2006+T44       DC    A(X44)               address of test routine
000022EC  002C                                        2007+          DC    H'44'                test number
000022EE  00                                          2008+          DC    X'00'
000022EF  9F                                          2009+          DC    HL1'159'             i3
000022F0  C4                                          2010+          DC    HL1'196'             i4
000022F1  01                                          2011+          DC    HL1'1'               m5
000022F2  01                                          2012+          DC    HL1'1'               cc
000022F3  0B                                          2013+          DC    HL1'11'              cc failed mask
000022F4  0000233C                                    2014+V2_44     DC    A(RE44+16)           address of v2: 16-byte packed decimal
000022F8  E5D7E2D6 D7404040                            2015+          DC    CL8'VPSOP'           instruction name
00002300  00000010                                    2016+          DC    A(16)                result length
00002304  0000232C                                    2017+REA44     DC    A(RE44)              result address
                                                      2018+*                                   INSTRUCTION UNDER TEST ROUTINE
00002308                                              2019+X44       DS    0F
00002308  E320 500C 0014          000022F4            2020+          LGF   R2,V2_44             get v2
0000230E  E722 0000 0006          00000000            2021+          VL    V2,0(R2)
00002314  E612 C419 F05B                              2022+          VPSOP V1,V2,159,196,1      test instruction
0000231A  E710 8F10 000E          00001110            2023+          VST   V1,V10UTPUT          save result
00002320  B98D 0020                                   2024+          EPSW  R2,R0                exptract psw
00002324  5020 8EF4               000010F4            2025+          ST    R2,CCPSW               to save CC
00002328  07FB                                        2026+          BR    R11                  return
0000232C                                              2027+RE44      DC    0F
0000232C                                              2028+          DROP  R5
0000232C  00000000 00000000                           2029           DC    XL16'0000000000000000000000220000000D'      V1
00002334  00000022 0000000D
0000233C  00000000 00000000                           2030           DC    XL16'0000000000000000000000220000000F'      V2
00002344  00000022 0000000F
                                                      2031
                                                      2032           VRI_G VPSOP,159,198,1,1          nz=1  pc=1
00002350                                              2033+          DS    0FD
00002350                           00002350           2034+          USING *,R5                 base for test data and test routine
00002350  00002370                                    2035+T45       DC    A(X45)               address of test routine
00002354  002D                                        2036+          DC    H'45'                test number
00002356  00                                          2037+          DC    X'00'
00002357  9F                                          2038+          DC    HL1'159'             i3
00002358  C6                                          2039+          DC    HL1'198'             i4
00002359  01                                          2040+          DC    HL1'1'               m5
0000235A  01                                          2041+          DC    HL1'1'               cc
0000235B  0B                                          2042+          DC    HL1'11'              cc failed mask
0000235C  000023A4                                    2043+V2_45     DC    A(RE45+16)           address of v2: 16-byte packed decimal
00002360  E5D7E2D6 D7404040                            2044+          DC    CL8'VPSOP'           instruction name
00002368  00000010                                    2045+          DC    A(16)                result length
0000236C  00002394                                    2046+REA45     DC    A(RE45)              result address
```

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  LOC          OBJECT CODE      ADDR1      ADDR2      STMT


                                                      2047+*                                      INSTRUCTION UNDER TEST ROUTINE
00002370                                              2048+X45         DS     0F
00002370  E320 500C 0014                  0000235C    2049+           LGF    R2,V2_45          get v2
00002376  E722 0000 0006                  00000000    2050+           VL     V2,0(R2)
0000237C  E612 C619 F05B                              2051+           VPSOP  V1,V2,159,198,1    test instruction
00002382  E710 8F10 000E                  00001110    2052+           VST    V1,V10UTPUT       save result
00002388  B98D 0020                                   2053+           EPSW   R2,R0             exptract psw
0000238C  5020 8EF4                       000010F4    2054+           ST     R2,CCPSW              to save CC
00002390  07FB                                        2055+           BR     R11               return
00002394                                              2056+RE45        DC     0F
00002394                                              2057+           DROP   R5
00002394  00000000 00000000                           2058            DC     XL16'00000000000000000000220000000D'     V1
0000239C  00000022 0000000D
000023A4  00000000 00000000                           2059            DC     XL16'00000000000000000000220000000E'     V2
000023AC  00000022 0000000E

                                                      2060
                                                      2061 * V1:nonzero V2:negative   PC='0' NZ='â€"'                    V1_sign=C  CC=2
                                                      2062            VRI_G VPSOP,159,132,1,2              nz=0  pc=0
000023B8                                              2063+           DS     0FD
000023B8                            000023B8          2064+           USING *,R5                base for test data and test routine
000023B8  000023D8                                    2065+T46         DC     A(X46)                  address of test routine
000023BC  002E                                        2066+           DC     H'46'             test number
000023BE  00                                          2067+           DC     X'00'
000023BF  9F                                          2068+           DC     HL1'159'                i3
000023C0  84                                          2069+           DC     HL1'132'                i4
000023C1  01                                          2070+           DC     HL1'1'                  m5
000023C2  02                                          2071+           DC     HL1'2'                  cc
000023C3  0D                                          2072+           DC     HL1'13'           cc failed mask
000023C4  0000240C                                    2073+V2_46       DC     A(RE46+16)        address of v2: 16-byte packed decimal
000023C8  E5D7E2D6 D7404040                           2074+           DC     CL8'VPSOP'        instruction name
000023D0  00000010                                    2075+           DC     A(16)             result length
000023D4  000023FC                                    2076+REA46       DC     A(RE46)           result address
                                                      2077+*                                      INSTRUCTION UNDER TEST ROUTINE
000023D8                                              2078+X46         DS     0F
000023D8  E320 500C 0014                  000023C4    2079+           LGF    R2,V2_46          get v2
000023DE  E722 0000 0006                  00000000    2080+           VL     V2,0(R2)
000023E4  E612 8419 F05B                              2081+           VPSOP  V1,V2,159,132,1    test instruction
000023EA  E710 8F10 000E                  00001110    2082+           VST    V1,V10UTPUT       save result
000023F0  B98D 0020                                   2083+           EPSW   R2,R0             exptract psw
000023F4  5020 8EF4                       000010F4    2084+           ST     R2,CCPSW              to save CC
000023F8  07FB                                        2085+           BR     R11               return
000023FC                                              2086+RE46        DC     0F
000023FC                                              2087+           DROP   R5
000023FC  00000000 00000000                           2088            DC     XL16'00000000000000000000220000000C'     V1
00002404  00000022 0000000C
0000240C  00000000 00000000                           2089            DC     XL16'00000000000000000000220000000D'     V2
00002414  00000022 0000000D

                                                      2090
                                                      2091            VRI_G VPSOP,159,196,1,2              nz=1  pc=0
00002420                                              2092+           DS     0FD
00002420                            00002420          2093+           USING *,R5                base for test data and test routine
00002420  00002440                                    2094+T47         DC     A(X47)                  address of test routine
00002424  002F                                        2095+           DC     H'47'             test number
00002426  00                                          2096+           DC     X'00'
00002427  9F                                          2097+           DC     HL1'159'                i3
00002428  C4                                          2098+           DC     HL1'196'                i4
```

```
  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

00002429  01                                       2099+        DC     HL1'1'               m5
0000242A  02                                       2100+        DC     HL1'2'               cc
0000242B  0D                                       2101+        DC     HL1'13'              cc failed mask
0000242C  00002474                                 2102+V2_47   DC     A(RE47+16)           address of v2: 16-byte packed decimal
00002430  E5D7E2D6 D7404040                         2103+        DC     CL8'VPSOP'           instruction name
00002438  00000010                                 2104+        DC     A(16)                result length
0000243C  00002464                                 2105+REA47   DC     A(RE47)              result address
                                                   2106+*                                   INSTRUCTION UNDER TEST ROUTINE
00002440                                            2107+X47     DS     0F
00002440  E320 500C 0014               0000242C     2108+        LGF    R2,V2_47             get v2
00002446  E722 0000 0006               00000000     2109+        VL     V2,0(R2)
0000244C  E612 C419 F05B                            2110+        VPSOP  V1,V2,159,196,1       test instruction
00002452  E710 8F10 000E               00001110     2111+        VST    V1,V10UTPUT          save result
00002458  B98D 0020                                 2112+        EPSW   R2,R0                exptract psw
0000245C  5020 8EF4                    000010F4     2113+        ST     R2,CCPSW                  to save CC
00002460  07FB                                      2114+        BR     R11                  return
00002464                                            2115+RE47    DC     0F
00002464                                            2116+        DROP   R5
00002464  00000000 00000000                         2117         DC     XL16'00000000000000000000220000000C'     V1
0000246C  00000022 0000000C
00002474  00000000 00000000                         2118         DC     XL16'00000000000000000000220000000D'     V2
0000247C  00000022 0000000D

                                                   2119
                                                   2120 * V1:nonzero V2:negative   PC='1' NZ='â€"'                V1_sign=F   CC=2
                                                   2121         VRI_G VPSOP,159,134,1,2            nz=0  pc=1
00002488                                            2122+        DS     0FD
00002488                        00002488            2123+        USING  *,R5                 base for test data and test routine
00002488  000024A8                                 2124+T48     DC     A(X48)               address of test routine
0000248C  0030                                      2125+        DC     H'48'                test number
0000248E  00                                        2126+        DC     X'00'
0000248F  9F                                        2127+        DC     HL1'159'             i3
00002490  86                                        2128+        DC     HL1'134'             i4
00002491  01                                        2129+        DC     HL1'1'               m5
00002492  02                                        2130+        DC     HL1'2'               cc
00002493  0D                                        2131+        DC     HL1'13'              cc failed mask
00002494  000024DC                                 2132+V2_48   DC     A(RE48+16)           address of v2: 16-byte packed decimal
00002498  E5D7E2D6 D7404040                         2133+        DC     CL8'VPSOP'           instruction name
000024A0  00000010                                 2134+        DC     A(16)                result length
000024A4  000024CC                                 2135+REA48   DC     A(RE48)              result address
                                                   2136+*                                   INSTRUCTION UNDER TEST ROUTINE
000024A8                                            2137+X48     DS     0F
000024A8  E320 500C 0014               00002494     2138+        LGF    R2,V2_48             get v2
000024AE  E722 0000 0006               00000000     2139+        VL     V2,0(R2)
000024B4  E612 8619 F05B                            2140+        VPSOP  V1,V2,159,134,1       test instruction
000024BA  E710 8F10 000E               00001110     2141+        VST    V1,V10UTPUT          save result
000024C0  B98D 0020                                 2142+        EPSW   R2,R0                exptract psw
000024C4  5020 8EF4                    000010F4     2143+        ST     R2,CCPSW                  to save CC
000024C8  07FB                                      2144+        BR     R11                  return
000024CC                                            2145+RE48    DC     0F
000024CC                                            2146+        DROP   R5
000024CC  00000000 00000000                         2147         DC     XL16'00000000000000000000220000000F'     V1
000024D4  00000022 0000000F
000024DC  00000000 00000000                         2148         DC     XL16'00000000000000000000220000000D'     V2
000024E4  00000022 0000000D

                                                   2149
                                                   2150         VRI_G VPSOP,159,198,1,2            nz=1  pc=1
```

```
  LOC          OBJECT CODE      ADDR1    ADDR2    STMT

000024F0                                          2151+           DS    0FD
000024F0                         000024F0         2152+           USING *,R5              base for test data and test routine
000024F0  00002510                                2153+T49        DC    A(X49)             address of test routine
000024F4  0031                                    2154+           DC    H'49'              test number
000024F6  00                                      2155+           DC    X'00'
000024F7  9F                                      2156+           DC    HL1'159'           i3
000024F8  C6                                      2157+           DC    HL1'198'           i4
000024F9  01                                      2158+           DC    HL1'1'             m5
000024FA  02                                      2159+           DC    HL1'2'             cc
000024FB  0D                                      2160+           DC    HL1'13'            cc failed mask
000024FC  00002544                                2161+V2_49      DC    A(RE49+16)         address of v2: 16-byte packed decimal
00002500  E5D7E2D6 D7404040                       2162+           DC    CL8'VPSOP'         instruction name
00002508  00000010                                2163+           DC    A(16)              result length
0000250C  00002534                                2164+REA49      DC    A(RE49)            result address
                                                  2165+*                                  INSTRUCTION UNDER TEST ROUTINE
00002510                                          2166+X49        DS    0F
00002510  E320 500C 0014              000024FC    2167+           LGF   R2,V2_49           get v2
00002516  E722 0000 0006              00000000    2168+           VL    V2,0(R2)
0000251C  E612 C619 F05B                          2169+           VPSOP V1,V2,159,198,1     test instruction
00002522  E710 8F10 000E              00001110    2170+           VST   V1,V10UTPUT        save result
00002528  B98D 0020                               2171+           EPSW  R2,R0              exptract psw
0000252C  5020 8EF4                   000010F4    2172+           ST    R2,CCPSW              to save CC
00002530  07FB                                    2173+           BR    R11                return
00002534                                          2174+RE49       DC    0F
00002534                                          2175+           DROP  R5
00002534  00000000 00000000                       2176            DC    XL16'00000000000000000000000220000000F'      V1
0000253C  00000022 0000000F
00002544  00000000 00000000                       2177            DC    XL16'00000000000000000000000220000000D'      V2
0000254C  00000022 0000000D
                                                  2178
                                                  2179 * V1:------  V2:invalid    PC='-' NZ='â€"'                    V1_sign=-   CC=-
                                                  2180 *           ???? test without exceptions?
                                                  2181
                                                  2182
                                                  2183 * V1:zero    V2:positive    PC='0' NZ='0'                     V1_sign=C   CC=0
                                                  2184            VRI_G VPSOP,159,132,1,0          nz=0   pc=0
00002558                                          2185+           DS    0FD
00002558                         00002558         2186+           USING *,R5              base for test data and test routine
00002558  00002578                                2187+T50        DC    A(X50)             address of test routine
0000255C  0032                                    2188+           DC    H'50'              test number
0000255E  00                                      2189+           DC    X'00'
0000255F  9F                                      2190+           DC    HL1'159'           i3
00002560  84                                      2191+           DC    HL1'132'           i4
00002561  01                                      2192+           DC    HL1'1'             m5
00002562  00                                      2193+           DC    HL1'0'             cc
00002563  07                                      2194+           DC    HL1'7'             cc failed mask
00002564  000025AC                                2195+V2_50      DC    A(RE50+16)         address of v2: 16-byte packed decimal
00002568  E5D7E2D6 D7404040                       2196+           DC    CL8'VPSOP'         instruction name
00002570  00000010                                2197+           DC    A(16)              result length
00002574  0000259C                                2198+REA50      DC    A(RE50)            result address
                                                  2199+*                                  INSTRUCTION UNDER TEST ROUTINE
00002578                                          2200+X50        DS    0F
00002578  E320 500C 0014              00002564    2201+           LGF   R2,V2_50           get v2
0000257E  E722 0000 0006              00000000    2202+           VL    V2,0(R2)
00002584  E612 8419 F05B                          2203+           VPSOP V1,V2,159,132,1     test instruction
0000258A  E710 8F10 000E              00001110    2204+           VST   V1,V10UTPUT        save result
```

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  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

00002590  B98D 0020                             2205+          EPSW  R2,R0              exptract psw
00002594  5020 8EF4                   000010F4  2206+          ST    R2,CCPSW              to save CC
00002598  07FB                                  2207+          BR    R11                return
0000259C                                        2208+RE50      DC    0F
0000259C                                        2209+          DROP  R5
0000259C  00000000 00000000                     2210           DC    XL16'000000000000000000000000000000000C'     V1
000025A4  00000000 0000000C
000025AC  00000000 00000000                     2211           DC    XL16'000000000000000000000000000000000A'     V2
000025B4  00000000 0000000A
                                                2212
                                                2213 * V1:zero   V2:positive   PC='1' NZ='0'              V1_sign=F  CC=0
                                                2214           VRI_G VPSOP,159,134,1,0          nz=0  pc=1
000025C0                                        2215+          DS    0FD
000025C0                         000025C0       2216+          USING *,R5               base for test data and test routine
000025C0  000025E0                              2217+T51       DC    A(X51)             address of test routine
000025C4  0033                                  2218+          DC    H'51'              test number
000025C6  00                                    2219+          DC    X'00'
000025C7  9F                                    2220+          DC    HL1'159'           i3
000025C8  86                                    2221+          DC    HL1'134'           i4
000025C9  01                                    2222+          DC    HL1'1'             m5
000025CA  00                                    2223+          DC    HL1'0'             cc
000025CB  07                                    2224+          DC    HL1'7'             cc failed mask
000025CC  00002614                              2225+V2_51     DC    A(RE51+16)         address of v2: 16-byte packed decimal
000025D0  E5D7E2D6 D7404040                     2226+          DC    CL8'VPSOP'         instruction name
000025D8  00000010                              2227+          DC    A(16)              result length
000025DC  00002604                              2228+REA51     DC    A(RE51)            result address
                                                2229+*                                 INSTRUCTION UNDER TEST ROUTINE
000025E0                                        2230+X51       DS    0F
000025E0  E320 500C 0014              000025CC  2231+          LGF   R2,V2_51           get v2
000025E6  E722 0000 0006              00000000  2232+          VL    V2,0(R2)
000025EC  E612 8619 F05B                        2233+          VPSOP V1,V2,159,134,1      test instruction
000025F2  E710 8F10 000E              00001110  2234+          VST   V1,V1OUTPUT        save result
000025F8  B98D 0020                             2235+          EPSW  R2,R0              exptract psw
000025FC  5020 8EF4                   000010F4  2236+          ST    R2,CCPSW              to save CC
00002600  07FB                                  2237+          BR    R11                return
00002604                                        2238+RE51      DC    0F
00002604                                        2239+          DROP  R5
00002604  00000000 00000000                     2240           DC    XL16'000000000000000000000000000000000F'     V1
0000260C  00000000 0000000F
00002614  00000000 00000000                     2241           DC    XL16'000000000000000000000000000000000A'     V2
0000261C  00000000 0000000A
                                                2242
                                                2243 * V1:zero   V2:positive   PC='-' NZ='1'              V1_sign=D  CC=0
                                                2244           VRI_G VPSOP,159,196,1,0          nz=1  pc=0
00002628                                        2245+          DS    0FD
00002628                         00002628       2246+          USING *,R5               base for test data and test routine
00002628  00002648                              2247+T52       DC    A(X52)             address of test routine
0000262C  0034                                  2248+          DC    H'52'              test number
0000262E  00                                    2249+          DC    X'00'
0000262F  9F                                    2250+          DC    HL1'159'           i3
00002630  C4                                    2251+          DC    HL1'196'           i4
00002631  01                                    2252+          DC    HL1'1'             m5
00002632  00                                    2253+          DC    HL1'0'             cc
00002633  07                                    2254+          DC    HL1'7'             cc failed mask
00002634  0000267C                              2255+V2_52     DC    A(RE52+16)         address of v2: 16-byte packed decimal
00002638  E5D7E2D6 D7404040                     2256+          DC    CL8'VPSOP'         instruction name
```

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  LOC          OBJECT CODE        ADDR1     ADDR2     STMT

00002640  00000010                                    2257+              DC      A(16)               result length
00002644  0000266C                                    2258+REA52         DC      A(RE52)             result address
                                                       2259+*                                        INSTRUCTION UNDER TEST ROUTINE
00002648                                              2260+X52           DS      0F
00002648  E320 500C 0014                   00002634   2261+              LGF     R2,V2_52            get v2
0000264E  E722 0000 0006                   00000000   2262+              VL      V2,0(R2)
00002654  E612 C419 F05B                              2263+              VPSOP   V1,V2,159,196,1      test instruction
0000265A  E710 8F10 000E                   00001110   2264+              VST     V1,V10UTPUT         save result
00002660  B98D 0020                                   2265+              EPSW    R2,R0               exptract psw
00002664  5020 8EF4                        000010F4   2266+              ST      R2,CCPSW                to save CC
00002668  07FB                                        2267+              BR      R11                 return
0000266C                                              2268+RE52          DC      0F
0000266C                                              2269+              DROP    R5
0000266C  00000000 00000000                           2270               DC      XL16'0000000000000000000000000000000D'     V1
00002674  00000000 0000000D
0000267C  00000000 00000000                           2271               DC      XL16'0000000000000000000000000000000A'     V2
00002684  00000000 0000000A

                                                       2272
                                                       2273               VRI_G  VPSOP,159,198,1,0              nz=1   pc=1
00002690                                              2274+              DS      0FD
00002690                            00002690          2275+              USING   *,R5                base for test data and test routine
00002690  000026B0                                    2276+T53           DC      A(X53)              address of test routine
00002694  0035                                        2277+              DC      H'53'               test number
00002696  00                                          2278+              DC      X'00'
00002697  9F                                          2279+              DC      HL1'159'            i3
00002698  C6                                          2280+              DC      HL1'198'            i4
00002699  01                                          2281+              DC      HL1'1'              m5
0000269A  00                                          2282+              DC      HL1'0'              cc
0000269B  07                                          2283+              DC      HL1'7'              cc failed mask
0000269C  000026E4                                    2284+V2_53         DC      A(RE53+16)          address of v2: 16-byte packed decimal
000026A0  E5D7E2D6 D7404040                           2285+              DC      CL8'VPSOP'          instruction name
000026A8  00000010                                    2286+              DC      A(16)               result length
000026AC  000026D4                                    2287+REA53         DC      A(RE53)             result address
                                                       2288+*                                        INSTRUCTION UNDER TEST ROUTINE
000026B0                                              2289+X53           DS      0F
000026B0  E320 500C 0014                   0000269C   2290+              LGF     R2,V2_53            get v2
000026B6  E722 0000 0006                   00000000   2291+              VL      V2,0(R2)
000026BC  E612 C619 F05B                              2292+              VPSOP   V1,V2,159,198,1      test instruction
000026C2  E710 8F10 000E                   00001110   2293+              VST     V1,V10UTPUT         save result
000026C8  B98D 0020                                   2294+              EPSW    R2,R0               exptract psw
000026CC  5020 8EF4                        000010F4   2295+              ST      R2,CCPSW                to save CC
000026D0  07FB                                        2296+              BR      R11                 return
000026D4                                              2297+RE53          DC      0F
000026D4                                              2298+              DROP    R5
000026D4  00000000 00000000                           2299               DC      XL16'0000000000000000000000000000000D'     V1
000026DC  00000000 0000000D
000026E4  00000000 00000000                           2300               DC      XL16'0000000000000000000000000000000C'     V2
000026EC  00000000 0000000C

                                                       2301
                                                       2302 * V1:zero    V2:negative   PC='0' NZ='-'                        V1_sign=C   CC=0
                                                       2303               VRI_G  VPSOP,159,132,1,0              nz=0   pc=0
000026F8                                              2304+              DS      0FD
000026F8                            000026F8          2305+              USING   *,R5                base for test data and test routine
000026F8  00002718                                    2306+T54           DC      A(X54)              address of test routine
000026FC  0036                                        2307+              DC      H'54'               test number
000026FE  00                                          2308+              DC      X'00'
```

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   LOC        OBJECT CODE      ADDR1      ADDR2      STMT

000026FF  9F                                        2309+         DC      HL1'159'              i3
00002700  84                                        2310+         DC      HL1'132'              i4
00002701  01                                        2311+         DC      HL1'1'                m5
00002702  00                                        2312+         DC      HL1'0'                cc
00002703  07                                        2313+         DC      HL1'7'                cc failed mask
00002704  0000274C                                  2314+V2_54    DC      A(RE54+16)            address of v2: 16-byte packed decimal
00002708  E5D7E2D6 D7404040                          2315+         DC      CL8'VPSOP'            instruction name
00002710  00000010                                  2316+         DC      A(16)                result length
00002714  0000273C                                  2317+REA54    DC      A(RE54)              result address
                                                    2318+*                                     INSTRUCTION UNDER TEST ROUTINE
00002718                                            2319+X54      DS      0F
00002718  E320 500C 0014               00002704     2320+         LGF     R2,V2_54             get v2
0000271E  E722 0000 0006               00000000     2321+         VL      V2,0(R2)
00002724  E612 8419 F05B                            2322+         VPSOP   V1,V2,159,132,1       test instruction
0000272A  E710 8F10 000E               00001110     2323+         VST     V1,V10UTPUT          save result
00002730  B98D 0020                                 2324+         EPSW    R2,R0                exptract psw
00002734  5020 8EF4                    000010F4     2325+         ST      R2,CCPSW                  to save CC
00002738  07FB                                      2326+         BR      R11                  return
0000273C                                            2327+RE54     DC      0F
0000273C                                            2328+         DROP    R5
0000273C  00000000 00000000                         2329          DC      XL16'0000000000000000000000000000000C'      V1
00002744  00000000 0000000C
0000274C  00000000 00000000                         2330          DC      XL16'0000000000000000000000000000000D'      V2
00002754  00000000 0000000D

                                                    2331
                                                    2332                  VRI_G VPSOP,159,196,1,0              nz=1  pc=0
00002760                                            2333+         DS      0FD
00002760                        00002760            2334+         USING *,R5                   base for test data and test routine
00002760  00002780                                  2335+T55      DC      A(X55)               address of test routine
00002764  0037                                      2336+         DC      H'55'                test number
00002766  00                                        2337+         DC      X'00'
00002767  9F                                        2338+         DC      HL1'159'              i3
00002768  C4                                        2339+         DC      HL1'196'              i4
00002769  01                                        2340+         DC      HL1'1'                m5
0000276A  00                                        2341+         DC      HL1'0'                cc
0000276B  07                                        2342+         DC      HL1'7'                cc failed mask
0000276C  000027B4                                  2343+V2_55    DC      A(RE55+16)            address of v2: 16-byte packed decimal
00002770  E5D7E2D6 D7404040                          2344+         DC      CL8'VPSOP'            instruction name
00002778  00000010                                  2345+         DC      A(16)                result length
0000277C  000027A4                                  2346+REA55    DC      A(RE55)              result address
                                                    2347+*                                     INSTRUCTION UNDER TEST ROUTINE
00002780                                            2348+X55      DS      0F
00002780  E320 500C 0014               0000276C     2349+         LGF     R2,V2_55             get v2
00002786  E722 0000 0006               00000000     2350+         VL      V2,0(R2)
0000278C  E612 C419 F05B                            2351+         VPSOP   V1,V2,159,196,1       test instruction
00002792  E710 8F10 000E               00001110     2352+         VST     V1,V10UTPUT          save result
00002798  B98D 0020                                 2353+         EPSW    R2,R0                exptract psw
0000279C  5020 8EF4                    000010F4     2354+         ST      R2,CCPSW                  to save CC
000027A0  07FB                                      2355+         BR      R11                  return
000027A4                                            2356+RE55     DC      0F
000027A4                                            2357+         DROP    R5
000027A4  00000000 00000000                         2358          DC      XL16'0000000000000000000000000000000C'      V1
000027AC  00000000 0000000C
000027B4  00000000 00000000                         2359          DC      XL16'0000000000000000000000000000000B'      V2
000027BC  00000000 0000000B

                                                    2360
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    LOC          OBJECT CODE        ADDR1      ADDR2      STMT

                                                          2361 * V1:zero    V2:negative    PC='1' NZ='-'                      V1_sign=F   CC=0
                                                          2362             VRI_G VPSOP,159,134,1,0            nz=0   pc=1
000027C8                                                  2363+            DS    0FD
000027C8                           000027C8               2364+            USING *,R5                base for test data and test routine
000027C8    000027E8                                      2365+T56         DC    A(X56)              address of test routine
000027CC    0038                                          2366+            DC    H'56'               test number
000027CE    00                                            2367+            DC    X'00'
000027CF    9F                                            2368+            DC    HL1'159'            i3
000027D0    86                                            2369+            DC    HL1'134'            i4
000027D1    01                                            2370+            DC    HL1'1'              m5
000027D2    00                                            2371+            DC    HL1'0'              cc
000027D3    07                                            2372+            DC    HL1'7'              cc failed mask
000027D4    0000281C                                      2373+V2_56       DC    A(RE56+16)          address of v2: 16-byte packed decimal
000027D8    E5D7E2D6 D7404040                             2374+            DC    CL8'VPSOP'          instruction name
000027E0    00000010                                      2375+            DC    A(16)               result length
000027E4    0000280C                                      2376+REA56       DC    A(RE56)             result address
                                                          2377+*                                    INSTRUCTION UNDER TEST ROUTINE
000027E8                                                  2378+X56         DS    0F
000027E8    E320 500C 0014                     000027D4   2379+            LGF   R2,V2_56            get v2
000027EE    E722 0000 0006                     00000000   2380+            VL    V2,0(R2)
000027F4    E612 8619 F05B                                2381+            VPSOP V1,V2,159,134,1      test instruction
000027FA    E710 8F10 000E                     00001110   2382+            VST   V1,V10UTPUT         save result
00002800    B98D 0020                                     2383+            EPSW  R2,R0               exptract psw
00002804    5020 8EF4                          000010F4   2384+            ST    R2,CCPSW               to save CC
00002808    07FB                                          2385+            BR    R11                 return
0000280C                                                  2386+RE56        DC    0F
0000280C                                                  2387+            DROP  R5
0000280C    00000000 00000000                             2388             DC    XL16'0000000000000000000000000000000F'      V1
00002814    00000000 0000000F
0000281C    00000000 00000000                             2389             DC    XL16'0000000000000000000000000000000D'      V2
00002824    00000000 0000000D

                                                          2390
                                                          2391             VRI_G VPSOP,159,198,1,0            nz=1   pc=1
00002830                                                  2392+            DS    0FD
00002830                           00002830               2393+            USING *,R5                base for test data and test routine
00002830    00002850                                      2394+T57         DC    A(X57)              address of test routine
00002834    0039                                          2395+            DC    H'57'               test number
00002836    00                                            2396+            DC    X'00'
00002837    9F                                            2397+            DC    HL1'159'            i3
00002838    C6                                            2398+            DC    HL1'198'            i4
00002839    01                                            2399+            DC    HL1'1'              m5
0000283A    00                                            2400+            DC    HL1'0'              cc
0000283B    07                                            2401+            DC    HL1'7'              cc failed mask
0000283C    00002884                                      2402+V2_57       DC    A(RE57+16)          address of v2: 16-byte packed decimal
00002840    E5D7E2D6 D7404040                             2403+            DC    CL8'VPSOP'          instruction name
00002848    00000010                                      2404+            DC    A(16)               result length
0000284C    00002874                                      2405+REA57       DC    A(RE57)             result address
                                                          2406+*                                    INSTRUCTION UNDER TEST ROUTINE
00002850                                                  2407+X57         DS    0F
00002850    E320 500C 0014                     0000283C   2408+            LGF   R2,V2_57            get v2
00002856    E722 0000 0006                     00000000   2409+            VL    V2,0(R2)
0000285C    E612 C619 F05B                                2410+            VPSOP V1,V2,159,198,1      test instruction
00002862    E710 8F10 000E                     00001110   2411+            VST   V1,V10UTPUT         save result
00002868    B98D 0020                                     2412+            EPSW  R2,R0               exptract psw
0000286C    5020 8EF4                          000010F4   2413+            ST    R2,CCPSW               to save CC
00002870    07FB                                          2414+            BR    R11                 return
```

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  LOC          OBJECT CODE      ADDR1      ADDR2      STMT

00002874                                              2415+RE57      DC     0F
00002874                                              2416+          DROP   R5
00002874   00000000 00000000                          2417           DC     XL16'0000000000000000000000000000000F'      V1
0000287C   00000000 0000000F
00002884   00000000 00000000                          2418           DC     XL16'0000000000000000000000000000000B'      V2
0000288C   00000000 0000000B
                                                      2419
                                                      2420 *--------------------------------------------------------
                                                      2421 * SC=10 (force positive): nv=1 to avoid data exceptions
                                                      2422 *--------------------------------------------------------
                                                      2423
                                                      2424 * V1:nonzero V2:------    PC='0' NZ='â€"'                    V1_sign=C  CC=2
                                                      2425 * V2:positive
                                                      2426          VRI_G VPSOP,159,136,1,2           nz=0  pc=0
00002898                                              2427+          DS     0FD
00002898                              00002898        2428+          USING  *,R5                      base for test data and test routine
00002898   000028B8                                   2429+T58       DC     A(X58)                    address of test routine
0000289C   003A                                       2430+          DC     H'58'                     test number
0000289E   00                                         2431+          DC     X'00'
0000289F   9F                                         2432+          DC     HL1'159'                  i3
000028A0   88                                         2433+          DC     HL1'136'                  i4
000028A1   01                                         2434+          DC     HL1'1'                    m5
000028A2   02                                         2435+          DC     HL1'2'                    cc
000028A3   0D                                         2436+          DC     HL1'13'                   cc failed mask
000028A4   000028EC                                   2437+V2_58     DC     A(RE58+16)                address of v2: 16-byte packed decimal
000028A8   E5D7E2D6 D7404040                           2438+          DC     CL8'VPSOP'                instruction name
000028B0   00000010                                   2439+          DC     A(16)                     result length
000028B4   000028DC                                   2440+REA58     DC     A(RE58)                   result address
                                                      2441+*                                          INSTRUCTION UNDER TEST ROUTINE
000028B8                                              2442+X58       DS     0F
000028B8   E320 500C 0014           000028A4          2443+          LGF    R2,V2_58                  get v2
000028BE   E722 0000 0006           00000000          2444+          VL     V2,0(R2)
000028C4   E612 8819 F05B                              2445+          VPSOP  V1,V2,159,136,1            test instruction
000028CA   E710 8F10 000E           00001110          2446+          VST    V1,V1OUTPUT               save result
000028D0   B98D 0020                                   2447+          EPSW   R2,R0                     exptract psw
000028D4   5020 8EF4                000010F4          2448+          ST     R2,CCPSW                      to save CC
000028D8   07FB                                        2449+          BR     R11                       return
000028DC                                              2450+RE58      DC     0F
000028DC                                              2451+          DROP   R5
000028DC   00000000 00000000                          2452           DC     XL16'0000000000000000000000220000000C'      V1
000028E4   00000022 0000000C
000028EC   00000000 00000000                          2453           DC     XL16'0000000000000000000000220000000A'      V2
000028F4   00000022 0000000A
                                                      2454
                                                      2455          VRI_G VPSOP,159,200,1,2           nz=1  pc=0
00002900                                              2456+          DS     0FD
00002900                              00002900        2457+          USING  *,R5                      base for test data and test routine
00002900   00002920                                   2458+T59       DC     A(X59)                    address of test routine
00002904   003B                                       2459+          DC     H'59'                     test number
00002906   00                                         2460+          DC     X'00'
00002907   9F                                         2461+          DC     HL1'159'                  i3
00002908   C8                                         2462+          DC     HL1'200'                  i4
00002909   01                                         2463+          DC     HL1'1'                    m5
0000290A   02                                         2464+          DC     HL1'2'                    cc
0000290B   0D                                         2465+          DC     HL1'13'                   cc failed mask
0000290C   00002954                                   2466+V2_59     DC     A(RE59+16)                address of v2: 16-byte packed decimal
```

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  LOC          OBJECT CODE      ADDR1      ADDR2      STMT

00002910  E5D7E2D6 D7404040                           2467+       DC    CL8'VPSOP'         instruction name
00002918  00000010                                    2468+       DC    A(16)             result length
0000291C  00002944                                    2469+REA59  DC    A(RE59)           result address
                                                      2470+*                              INSTRUCTION UNDER TEST ROUTINE
00002920                                              2471+X59    DS    0F
00002920  E320 500C 0014                   0000290C   2472+       LGF   R2,V2_59          get v2
00002926  E722 0000 0006                   00000000   2473+       VL    V2,0(R2)
0000292C  E612 C819 F05B                              2474+       VPSOP V1,V2,159,200,1     test instruction
00002932  E710 8F10 000E                   00001110   2475+       VST   V1,V10UTPUT       save result
00002938  B98D 0020                                   2476+       EPSW  R2,R0             exptract psw
0000293C  5020 8EF4                        000010F4   2477+       ST    R2,CCPSW              to save CC
00002940  07FB                                        2478+       BR    R11               return
00002944                                              2479+RE59   DC    0F
00002944                                              2480+       DROP  R5
00002944  00000000 00000000                           2481        DC    XL16'00000000000000000000000220000000C'      V1
0000294C  00000022 0000000C
00002954  00000000 00000000                           2482        DC    XL16'00000000000000000000000220000000A'      V2
0000295C  00000022 0000000A
                                                      2483  * V2:negative
                                                      2484        VRI_G VPSOP,159,136,1,2           nz=0  pc=0
00002968                                              2485+       DS    0FD
00002968                        00002968              2486+       USING *,R5             base for test data and test routine
00002968  00002988                                    2487+T60    DC    A(X60)            address of test routine
0000296C  003C                                        2488+       DC    H'60'             test number
0000296E  00                                          2489+       DC    X'00'
0000296F  9F                                          2490+       DC    HL1'159'          i3
00002970  88                                          2491+       DC    HL1'136'          i4
00002971  01                                          2492+       DC    HL1'1'            m5
00002972  02                                          2493+       DC    HL1'2'            cc
00002973  0D                                          2494+       DC    HL1'13'           cc failed mask
00002974  000029BC                                    2495+V2_60  DC    A(RE60+16)        address of v2: 16-byte packed decimal
00002978  E5D7E2D6 D7404040                           2496+       DC    CL8'VPSOP'        instruction name
00002980  00000010                                    2497+       DC    A(16)             result length
00002984  000029AC                                    2498+REA60  DC    A(RE60)           result address
                                                      2499+*                              INSTRUCTION UNDER TEST ROUTINE
00002988                                              2500+X60    DS    0F
00002988  E320 500C 0014                   00002974   2501+       LGF   R2,V2_60          get v2
0000298E  E722 0000 0006                   00000000   2502+       VL    V2,0(R2)
00002994  E612 8819 F05B                              2503+       VPSOP V1,V2,159,136,1     test instruction
0000299A  E710 8F10 000E                   00001110   2504+       VST   V1,V10UTPUT       save result
000029A0  B98D 0020                                   2505+       EPSW  R2,R0             exptract psw
000029A4  5020 8EF4                        000010F4   2506+       ST    R2,CCPSW              to save CC
000029A8  07FB                                        2507+       BR    R11               return
000029AC                                              2508+RE60   DC    0F
000029AC                                              2509+       DROP  R5
000029AC  00000000 00000000                           2510        DC    XL16'00000000000000000000000220000000C'      V1
000029B4  00000022 0000000C
000029BC  00000000 00000000                           2511        DC    XL16'00000000000000000000000220000000D'      V2
000029C4  00000022 0000000D
                                                      2512
                                                      2513        VRI_G VPSOP,159,200,1,2           nz=1  pc=0
000029D0                                              2514+       DS    0FD
000029D0                        000029D0              2515+       USING *,R5             base for test data and test routine
000029D0  000029F0                                    2516+T61    DC    A(X61)            address of test routine
000029D4  003D                                        2517+       DC    H'61'             test number
000029D6  00                                          2518+       DC    X'00'
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  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

000029D7  9F                                        2519+         DC    HL1'159'              i3
000029D8  C8                                        2520+         DC    HL1'200'              i4
000029D9  01                                        2521+         DC    HL1'1'               m5
000029DA  02                                        2522+         DC    HL1'2'               cc
000029DB  0D                                        2523+         DC    HL1'13'              cc failed mask
000029DC  00002A24                                  2524+V2_61    DC    A(RE61+16)           address of v2: 16-byte packed decimal
000029E0  E5D7E2D6 D7404040                         2525+         DC    CL8'VPSOP'           instruction name
000029E8  00000010                                  2526+         DC    A(16)                result length
000029EC  00002A14                                  2527+REA61    DC    A(RE61)              result address
                                                    2528+*                                  INSTRUCTION UNDER TEST ROUTINE
000029F0                                            2529+X61      DS    0F
000029F0  E320 500C 0014              000029DC      2530+         LGF   R2,V2_61             get v2
000029F6  E722 0000 0006              00000000      2531+         VL    V2,0(R2)
000029FC  E612 C819 F05B                            2532+         VPSOP V1,V2,159,200,1        test instruction
00002A02  E710 8F10 000E              00001110      2533+         VST   V1,V10UTPUT          save result
00002A08  B98D 0020                                 2534+         EPSW  R2,R0                exptract psw
00002A0C  5020 8EF4                   000010F4      2535+         ST    R2,CCPSW                to save CC
00002A10  07FB                                      2536+         BR    R11                  return
00002A14                                            2537+RE61     DC    0F
00002A14                                            2538+         DROP  R5
00002A14  00000000 00000000                         2539          DC    XL16'0000000000000000000000220000000C'     V1
00002A1C  00000022 0000000C
00002A24  00000000 00000000                         2540          DC    XL16'0000000000000000000000220000000B'     V2
00002A2C  00000022 0000000B
                                                    2541
                                                    2542  * V1:nonzero V2:------    PC='1' NZ='â€"'                      V1_sign=F  CC=2
                                                    2543  * V2:positive
                                                    2544          VRI_G VPSOP,159,138,1,2           nz=0  pc=1
00002A38                                            2545+         DS    0FD
00002A38                  00002A38                  2546+         USING *,R5                 base for test data and test routine
00002A38  00002A58                                  2547+T62      DC    A(X62)               address of test routine
00002A3C  003E                                      2548+         DC    H'62'                test number
00002A3E  00                                        2549+         DC    X'00'
00002A3F  9F                                        2550+         DC    HL1'159'              i3
00002A40  8A                                        2551+         DC    HL1'138'              i4
00002A41  01                                        2552+         DC    HL1'1'               m5
00002A42  02                                        2553+         DC    HL1'2'               cc
00002A43  0D                                        2554+         DC    HL1'13'              cc failed mask
00002A44  00002A8C                                  2555+V2_62    DC    A(RE62+16)           address of v2: 16-byte packed decimal
00002A48  E5D7E2D6 D7404040                         2556+         DC    CL8'VPSOP'           instruction name
00002A50  00000010                                  2557+         DC    A(16)                result length
00002A54  00002A7C                                  2558+REA62    DC    A(RE62)              result address
                                                    2559+*                                  INSTRUCTION UNDER TEST ROUTINE
00002A58                                            2560+X62      DS    0F
00002A58  E320 500C 0014              00002A44      2561+         LGF   R2,V2_62             get v2
00002A5E  E722 0000 0006              00000000      2562+         VL    V2,0(R2)
00002A64  E612 8A19 F05B                            2563+         VPSOP V1,V2,159,138,1        test instruction
00002A6A  E710 8F10 000E              00001110      2564+         VST   V1,V10UTPUT          save result
00002A70  B98D 0020                                 2565+         EPSW  R2,R0                exptract psw
00002A74  5020 8EF4                   000010F4      2566+         ST    R2,CCPSW                to save CC
00002A78  07FB                                      2567+         BR    R11                  return
00002A7C                                            2568+RE62     DC    0F
00002A7C                                            2569+         DROP  R5
00002A7C  00000000 00000000                         2570          DC    XL16'0000000000000000000000220000000F'     V1
00002A84  00000022 0000000F
00002A8C  00000000 00000000                         2571          DC    XL16'0000000000000000000000220000000A'     V2
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LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
00002A94	00000022 0000000A							
				2572				
				2573		VRI_G	VPSOP,159,202,1,2	nz=1 pc=1
00002AA0				2574+	DS	0FD		
00002AA0		00002AA0		2575+	USING	*,R5		base for test data and test routine
00002AA0	00002AC0			2576+T63	DC	A(X63)		address of test routine
00002AA4	003F			2577+	DC	H'63'		test number
00002AA6	00			2578+	DC	X'00'		
00002AA7	9F			2579+	DC	HL1'159'		i3
00002AA8	CA			2580+	DC	HL1'202'		i4
00002AA9	01			2581+	DC	HL1'1'		m5
00002AAA	02			2582+	DC	HL1'2'		cc
00002AAB	0D			2583+	DC	HL1'13'		cc failed mask
00002AAC	00002AF4			2584+V2_63	DC	A(RE63+16)		address of v2: 16-byte packed decimal
00002AB0	E5D7E2D6 D7404040			2585+	DC	CL8'VPSOP'		instruction name
00002AB8	00000010			2586+	DC	A(16)		result length
00002ABC	00002AE4			2587+REA63	DC	A(RE63)		result address
				2588+*				INSTRUCTION UNDER TEST ROUTINE
00002AC0				2589+X63	DS	0F		
00002AC0	E320 500C 0014		00002AAC	2590+	LGF	R2,V2_63		get v2
00002AC6	E722 0000 0006		00000000	2591+	VL	V2,0(R2)		
00002ACC	E612 CA19 F05B			2592+	VPSOP	V1,V2,159,202,1		test instruction
00002AD2	E710 8F10 000E		00001110	2593+	VST	V1,V10UTPUT		save result
00002AD8	B98D 0020			2594+	EPSW	R2,R0		exptract psw
00002ADC	5020 8EF4		000010F4	2595+	ST	R2,CCPSW		to save CC
00002AE0	07FB			2596+	BR	R11		return
00002AE4				2597+RE63	DC	0F		
00002AE4				2598+	DROP	R5		
00002AE4	00000000 00000000			2599	DC	XL16'00000000000000000000220000000F'		V1
00002AEC	00000022 0000000F							
00002AF4	00000000 00000000			2600	DC	XL16'00000000000000000000220000000A'		V2
00002AFC	00000022 0000000A							
				2601	* V2: negative			
				2602		VRI_G	VPSOP,159,138,1,2	nz=0 pc=1
00002B08				2603+	DS	0FD		
00002B08		00002B08		2604+	USING	*,R5		base for test data and test routine
00002B08	00002B28			2605+T64	DC	A(X64)		address of test routine
00002B0C	0040			2606+	DC	H'64'		test number
00002B0E	00			2607+	DC	X'00'		
00002B0F	9F			2608+	DC	HL1'159'		i3
00002B10	8A			2609+	DC	HL1'138'		i4
00002B11	01			2610+	DC	HL1'1'		m5
00002B12	02			2611+	DC	HL1'2'		cc
00002B13	0D			2612+	DC	HL1'13'		cc failed mask
00002B14	00002B5C			2613+V2_64	DC	A(RE64+16)		address of v2: 16-byte packed decimal
00002B18	E5D7E2D6 D7404040			2614+	DC	CL8'VPSOP'		instruction name
00002B20	00000010			2615+	DC	A(16)		result length
00002B24	00002B4C			2616+REA64	DC	A(RE64)		result address
				2617+*				INSTRUCTION UNDER TEST ROUTINE
00002B28				2618+X64	DS	0F		
00002B28	E320 500C 0014		00002B14	2619+	LGF	R2,V2_64		get v2
00002B2E	E722 0000 0006		00000000	2620+	VL	V2,0(R2)		
00002B34	E612 8A19 F05B			2621+	VPSOP	V1,V2,159,138,1		test instruction
00002B3A	E710 8F10 000E		00001110	2622+	VST	V1,V10UTPUT		save result
00002B40	B98D 0020			2623+	EPSW	R2,R0		exptract psw
00002B44	5020 8EF4		000010F4	2624+	ST	R2,CCPSW		to save CC

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  LOC          OBJECT CODE        ADDR1      ADDR2     STMT

 00002B48  07FB                                        2625+        BR    R11             return
 00002B4C                                              2626+RE64    DC    0F
 00002B4C                                              2627+        DROP  R5
 00002B4C  00000000 00000000                           2628         DC    XL16'00000000000000000000000220000000F'     V1
 00002B54  00000022 0000000F
 00002B5C  00000000 00000000                           2629         DC    XL16'00000000000000000000000220000000D'     V2
 00002B64  00000022 0000000D

                                                       2630
                                                       2631         VRI_G VPSOP,159,202,1,2          nz=1   pc=1
 00002B70                                              2632+        DS    0FD
 00002B70                             00002B70         2633+        USING *,R5              base for test data and test routine
 00002B70  00002B90                                    2634+T65     DC    A(X65)          address of test routine
 00002B74  0041                                        2635+        DC    H'65'           test number
 00002B76  00                                          2636+        DC    X'00'
 00002B77  9F                                          2637+        DC    HL1'159'             i3
 00002B78  CA                                          2638+        DC    HL1'202'             i4
 00002B79  01                                          2639+        DC    HL1'1'               m5
 00002B7A  02                                          2640+        DC    HL1'2'               cc
 00002B7B  0D                                          2641+        DC    HL1'13'              cc failed mask
 00002B7C  00002BC4                                    2642+V2_65   DC    A(RE65+16)      address of v2: 16-byte packed decimal
 00002B80  E5D7E2D6 D7404040                           2643+        DC    CL8'VPSOP'           instruction name
 00002B88  00000010                                    2644+        DC    A(16)           result length
 00002B8C  00002BB4                                    2645+REA65   DC    A(RE65)         result address
                                                       2646+*                              INSTRUCTION UNDER TEST ROUTINE
 00002B90                                              2647+X65     DS    0F
 00002B90  E320 500C 0014           00002B7C           2648+        LGF   R2,V2_65        get v2
 00002B96  E722 0000 0006           00000000           2649+        VL    V2,0(R2)
 00002B9C  E612 CA19 F05B                              2650+        VPSOP V1,V2,159,202,1    test instruction
 00002BA2  E710 8F10 000E           00001110           2651+        VST   V1,V1OUTPUT     save result
 00002BA8  B98D 0020                                   2652+        EPSW  R2,R0           exptract psw
 00002BAC  5020 8EF4                000010F4           2653+        ST    R2,CCPSW             to save CC
 00002BB0  07FB                                        2654+        BR    R11             return
 00002BB4                                              2655+RE65    DC    0F
 00002BB4                                              2656+        DROP  R5
 00002BB4  00000000 00000000                           2657         DC    XL16'00000000000000000000000220000000F'     V1
 00002BBC  00000022 0000000F
 00002BC4  00000000 00000000                           2658         DC    XL16'00000000000000000000000220000000B'     V2
 00002BCC  00000022 0000000B

                                                       2659
                                                       2660 * V1:zero V2:------    PC='0' NZ='â€"'               V1_sign=C  CC=0
                                                       2661 * V2:positive
                                                       2662         VRI_G VPSOP,159,136,1,0          nz=0   pc=0
 00002BD8                                              2663+        DS    0FD
 00002BD8                             00002BD8         2664+        USING *,R5              base for test data and test routine
 00002BD8  00002BF8                                    2665+T66     DC    A(X66)          address of test routine
 00002BDC  0042                                        2666+        DC    H'66'           test number
 00002BDE  00                                          2667+        DC    X'00'
 00002BDF  9F                                          2668+        DC    HL1'159'             i3
 00002BE0  88                                          2669+        DC    HL1'136'             i4
 00002BE1  01                                          2670+        DC    HL1'1'               m5
 00002BE2  00                                          2671+        DC    HL1'0'               cc
 00002BE3  07                                          2672+        DC    HL1'7'               cc failed mask
 00002BE4  00002C2C                                    2673+V2_66   DC    A(RE66+16)      address of v2: 16-byte packed decimal
 00002BE8  E5D7E2D6 D7404040                           2674+        DC    CL8'VPSOP'           instruction name
 00002BF0  00000010                                    2675+        DC    A(16)           result length
 00002BF4  00002C1C                                    2676+REA66   DC    A(RE66)         result address
```

```
  LOC         OBJECT CODE       ADDR1     ADDR2     STMT


                                                    2677+*                                    INSTRUCTION UNDER TEST ROUTINE
00002BF8                                            2678+X66       DS    0F
00002BF8    E320 500C 0014                00002BE4  2679+          LGF   R2,V2_66              get v2
00002BFE    E722 0000 0006                00000000  2680+          VL    V2,0(R2)
00002C04    E612 8819 F05B                          2681+          VPSOP V1,V2,159,136,1       test instruction
00002C0A    E710 8F10 000E                00001110  2682+          VST   V1,V10UTPUT           save result
00002C10    B98D 0020                               2683+          EPSW  R2,R0                exptract psw
00002C14    5020 8EF4                     000010F4  2684+          ST    R2,CCPSW                  to save CC
00002C18    07FB                                    2685+          BR    R11                  return
00002C1C                                            2686+RE66      DC    0F
00002C1C                                            2687+          DROP  R5
00002C1C    00000000 00000000                       2688           DC    XL16'0000000000000000000000000000000C'     V1
00002C24    00000000 0000000C
00002C2C    00000000 00000000                       2689           DC    XL16'0000000000000000000000000000000A'     V2
00002C34    00000000 0000000A

                                                    2690
                                                    2691           VRI_G VPSOP,159,200,1,0          nz=1  pc=0
00002C40                                            2692+          DS    0FD
00002C40                              00002C40      2693+          USING *,R5                 base for test data and test routine
00002C40    00002C60                                2694+T67       DC    A(X67)               address of test routine
00002C44    0043                                    2695+          DC    H'67'                test number
00002C46    00                                      2696+          DC    X'00'
00002C47    9F                                      2697+          DC    HL1'159'             i3
00002C48    C8                                      2698+          DC    HL1'200'             i4
00002C49    01                                      2699+          DC    HL1'1'               m5
00002C4A    00                                      2700+          DC    HL1'0'               cc
00002C4B    07                                      2701+          DC    HL1'7'               cc failed mask
00002C4C    00002C94                                2702+V2_67     DC    A(RE67+16)           address of v2: 16-byte packed decimal
00002C50    E5D7E2D6 D7404040                       2703+          DC    CL8'VPSOP'           instruction name
00002C58    00000010                                2704+          DC    A(16)                result length
00002C5C    00002C84                                2705+REA67     DC    A(RE67)              result address
                                                    2706+*                                    INSTRUCTION UNDER TEST ROUTINE
00002C60                                            2707+X67       DS    0F
00002C60    E320 500C 0014                00002C4C  2708+          LGF   R2,V2_67             get v2
00002C66    E722 0000 0006                00000000  2709+          VL    V2,0(R2)
00002C6C    E612 C819 F05B                          2710+          VPSOP V1,V2,159,200,1       test instruction
00002C72    E710 8F10 000E                00001110  2711+          VST   V1,V10UTPUT          save result
00002C78    B98D 0020                               2712+          EPSW  R2,R0                exptract psw
00002C7C    5020 8EF4                     000010F4  2713+          ST    R2,CCPSW                  to save CC
00002C80    07FB                                    2714+          BR    R11                  return
00002C84                                            2715+RE67      DC    0F
00002C84                                            2716+          DROP  R5
00002C84    00000000 00000000                       2717           DC    XL16'0000000000000000000000000000000C'     V1
00002C8C    00000000 0000000C
00002C94    00000000 00000000                       2718           DC    XL16'0000000000000000000000000000000A'     V2
00002C9C    00000000 0000000A

                                                    2719 * V2:negative
                                                    2720           VRI_G VPSOP,159,136,1,0          nz=0  pc=0
00002CA8                                            2721+          DS    0FD
00002CA8                              00002CA8      2722+          USING *,R5                 base for test data and test routine
00002CA8    00002CC8                                2723+T68       DC    A(X68)               address of test routine
00002CAC    0044                                    2724+          DC    H'68'                test number
00002CAE    00                                      2725+          DC    X'00'
00002CAF    9F                                      2726+          DC    HL1'159'             i3
00002CB0    88                                      2727+          DC    HL1'136'             i4
00002CB1    01                                      2728+          DC    HL1'1'               m5
```

```
    LOC          OBJECT CODE      ADDR1      ADDR2     STMT

00002CB2  00                                          2729+           DC    HL1'0'                    cc
00002CB3  07                                          2730+           DC    HL1'7'                    cc failed mask
00002CB4  00002CFC                                    2731+V2_68       DC    A(RE68+16)                address of v2: 16-byte packed decimal
00002CB8  E5D7E2D6 D7404040                           2732+           DC    CL8'VPSOP'                instruction name
00002CC0  00000010                                    2733+           DC    A(16)                     result length
00002CC4  00002CEC                                    2734+REA68      DC    A(RE68)                   result address
                                                      2735+*                                          INSTRUCTION UNDER TEST ROUTINE
00002CC8                                              2736+X68        DS    0F
00002CC8  E320 500C 0014                  00002CB4    2737+           LGF   R2,V2_68                  get v2
00002CCE  E722 0000 0006                  00000000    2738+           VL    V2,0(R2)
00002CD4  E612 8819 F05B                              2739+           VPSOP V1,V2,159,136,1            test instruction
00002CDA  E710 8F10 000E                  00001110    2740+           VST   V1,V10UTPUT               save result
00002CE0  B98D 0020                                   2741+           EPSW  R2,R0                     exptract psw
00002CE4  5020 8EF4                       000010F4    2742+           ST    R2,CCPSW                      to save CC
00002CE8  07FB                                        2743+           BR    R11                       return
00002CEC                                              2744+RE68       DC    0F
00002CEC                                              2745+           DROP  R5
00002CEC  00000000 00000000                           2746            DC    XL16'0000000000000000000000000000000C'      V1
00002CF4  00000000 0000000C
00002CFC  00000000 00000000                           2747            DC    XL16'0000000000000000000000000000000D'      V2
00002D04  00000000 0000000D

                                                      2748
                                                      2749            VRI_G VPSOP,159,200,1,0          nz=1  pc=0
00002D10                                              2750+           DS    0FD
00002D10                        00002D10              2751+           USING *,R5                      base for test data and test routine
00002D10  00002D30                                    2752+T69        DC    A(X69)                    address of test routine
00002D14  0045                                        2753+           DC    H'69'                     test number
00002D16  00                                          2754+           DC    X'00'
00002D17  9F                                          2755+           DC    HL1'159'                  i3
00002D18  C8                                          2756+           DC    HL1'200'                  i4
00002D19  01                                          2757+           DC    HL1'1'                    m5
00002D1A  00                                          2758+           DC    HL1'0'                    cc
00002D1B  07                                          2759+           DC    HL1'7'                    cc failed mask
00002D1C  00002D64                                    2760+V2_69      DC    A(RE69+16)                address of v2: 16-byte packed decimal
00002D20  E5D7E2D6 D7404040                           2761+           DC    CL8'VPSOP'                instruction name
00002D28  00000010                                    2762+           DC    A(16)                     result length
00002D2C  00002D54                                    2763+REA69      DC    A(RE69)                   result address
                                                      2764+*                                          INSTRUCTION UNDER TEST ROUTINE
00002D30                                              2765+X69        DS    0F
00002D30  E320 500C 0014                  00002D1C    2766+           LGF   R2,V2_69                  get v2
00002D36  E722 0000 0006                  00000000    2767+           VL    V2,0(R2)
00002D3C  E612 C819 F05B                              2768+           VPSOP V1,V2,159,200,1            test instruction
00002D42  E710 8F10 000E                  00001110    2769+           VST   V1,V10UTPUT               save result
00002D48  B98D 0020                                   2770+           EPSW  R2,R0                     exptract psw
00002D4C  5020 8EF4                       000010F4    2771+           ST    R2,CCPSW                      to save CC
00002D50  07FB                                        2772+           BR    R11                       return
00002D54                                              2773+RE69       DC    0F
00002D54                                              2774+           DROP  R5
00002D54  00000000 00000000                           2775            DC    XL16'0000000000000000000000000000000C'      V1
00002D5C  00000000 0000000C
00002D64  00000000 00000000                           2776            DC    XL16'0000000000000000000000000000000B'      V2
00002D6C  00000000 0000000B

                                                      2777
                                                      2778 * V1:zero V2:------    PC='1' NZ='â€"'              V1_sign=F  CC=0
                                                      2779 * V2:positive
                                                      2780            VRI_G VPSOP,159,138,1,0          nz=0  pc=1
```

```
  LOC          OBJECT CODE      ADDR1     ADDR2     STMT


00002D78                                            2781+           DS     0FD
00002D78                        00002D78            2782+           USING  *,R5                  base for test data and test routine
00002D78    00002D98                                2783+T70        DC     A(X70)                address of test routine
00002D7C    0046                                    2784+           DC     H'70'                 test number
00002D7E    00                                      2785+           DC     X'00'
00002D7F    9F                                      2786+           DC     HL1'159'              i3
00002D80    8A                                      2787+           DC     HL1'138'              i4
00002D81    01                                      2788+           DC     HL1'1'                m5
00002D82    00                                      2789+           DC     HL1'0'                cc
00002D83    07                                      2790+           DC     HL1'7'                cc failed mask
00002D84    00002DCC                                2791+V2_70       DC     A(RE70+16)            address of v2: 16-byte packed decimal
00002D88    E5D7E2D6 D7404040                       2792+           DC     CL8'VPSOP'            instruction name
00002D90    00000010                                2793+           DC     A(16)                 result length
00002D94    00002DBC                                2794+REA70      DC     A(RE70)               result address
                                                    2795+*                                       INSTRUCTION UNDER TEST ROUTINE
00002D98                                            2796+X70        DS     0F
00002D98    E320 500C 0014                00002D84  2797+           LGF    R2,V2_70              get v2
00002D9E    E722 0000 0006                00000000  2798+           VL     V2,0(R2)
00002DA4    E612 8A19 F05B                          2799+           VPSOP  V1,V2,159,138,1        test instruction
00002DAA    E710 8F10 000E                00001110  2800+           VST    V1,V1OUTPUT           save result
00002DB0    B98D 0020                               2801+           EPSW   R2,R0                 exptract psw
00002DB4    5020 8EF4                     000010F4  2802+           ST     R2,CCPSW                  to save CC
00002DB8    07FB                                    2803+           BR     R11                   return
00002DBC                                            2804+RE70       DC     0F
00002DBC                                            2805+           DROP   R5
00002DBC    00000000 00000000                       2806            DC     XL16'0000000000000000000000000000000F'      V1
00002DC4    00000000 0000000F
00002DCC    00000000 00000000                       2807            DC     XL16'0000000000000000000000000000000A'      V2
00002DD4    00000000 0000000A
                                                    2808
                                                    2809            VRI_G  VPSOP,159,202,1,0           nz=1  pc=1
00002DE0                                            2810+           DS     0FD
00002DE0                        00002DE0            2811+           USING  *,R5                  base for test data and test routine
00002DE0    00002E00                                2812+T71        DC     A(X71)                address of test routine
00002DE4    0047                                    2813+           DC     H'71'                 test number
00002DE6    00                                      2814+           DC     X'00'
00002DE7    9F                                      2815+           DC     HL1'159'              i3
00002DE8    CA                                      2816+           DC     HL1'202'              i4
00002DE9    01                                      2817+           DC     HL1'1'                m5
00002DEA    00                                      2818+           DC     HL1'0'                cc
00002DEB    07                                      2819+           DC     HL1'7'                cc failed mask
00002DEC    00002E34                                2820+V2_71       DC     A(RE71+16)            address of v2: 16-byte packed decimal
00002DF0    E5D7E2D6 D7404040                       2821+           DC     CL8'VPSOP'            instruction name
00002DF8    00000010                                2822+           DC     A(16)                 result length
00002DFC    00002E24                                2823+REA71      DC     A(RE71)               result address
                                                    2824+*                                       INSTRUCTION UNDER TEST ROUTINE
00002E00                                            2825+X71        DS     0F
00002E00    E320 500C 0014                00002DEC  2826+           LGF    R2,V2_71              get v2
00002E06    E722 0000 0006                00000000  2827+           VL     V2,0(R2)
00002E0C    E612 CA19 F05B                          2828+           VPSOP  V1,V2,159,202,1        test instruction
00002E12    E710 8F10 000E                00001110  2829+           VST    V1,V1OUTPUT           save result
00002E18    B98D 0020                               2830+           EPSW   R2,R0                 exptract psw
00002E1C    5020 8EF4                     000010F4  2831+           ST     R2,CCPSW                  to save CC
00002E20    07FB                                    2832+           BR     R11                   return
00002E24                                            2833+RE71       DC     0F
00002E24                                            2834+           DROP   R5
```

```
  LOC          OBJECT CODE      ADDR1      ADDR2     STMT

00002E24  00000000 00000000                         2835          DC      XL16'0000000000000000000000000000000F'       V1
00002E2C  00000000 0000000F
00002E34  00000000 00000000                         2836          DC      XL16'0000000000000000000000000000000A'       V2
00002E3C  00000000 0000000A
                                                    2837 * V2: negative
                                                    2838          VRI_G VPSOP, 159, 138, 1, 0              nz=0  pc=1
00002E48                                            2839+         DS      0FD
00002E48                       00002E48             2840+         USING *, R5                  base for test data and test routine
00002E48  00002E68                                  2841+T72      DC      A(X72)                address of test routine
00002E4C  0048                                      2842+         DC      H'72'                 test number
00002E4E  00                                        2843+         DC      X'00'
00002E4F  9F                                        2844+         DC      HL1'159'              i3
00002E50  8A                                        2845+         DC      HL1'138'              i4
00002E51  01                                        2846+         DC      HL1'1'                m5
00002E52  00                                        2847+         DC      HL1'0'                cc
00002E53  07                                        2848+         DC      HL1'7'                cc failed mask
00002E54  00002E9C                                  2849+V2_72    DC      A(RE72+16)            address of v2: 16-byte packed decimal
00002E58  E5D7E2D6 D7404040                         2850+         DC      CL8'VPSOP'            instruction name
00002E60  00000010                                  2851+         DC      A(16)                result length
00002E64  00002E8C                                  2852+REA72    DC      A(RE72)              result address
                                                    2853+*                                     INSTRUCTION UNDER TEST ROUTINE
00002E68                                            2854+X72      DS      0F
00002E68  E320 500C 0014                 00002E54   2855+         LGF     R2, V2_72            get v2
00002E6E  E722 0000 0006                 00000000   2856+         VL      V2, 0(R2)
00002E74  E612 8A19 F05B                            2857+         VPSOP V1, V2, 159, 138, 1     test instruction
00002E7A  E710 8F10 000E                 00001110   2858+         VST     V1, V10OUTPUT        save result
00002E80  B98D 0020                                 2859+         EPSW    R2, R0               exptract psw
00002E84  5020 8EF4                      000010F4   2860+         ST      R2, CCPSW               to save CC
00002E88  07FB                                      2861+         BR      R11                  return
00002E8C                                            2862+RE72     DC      0F
00002E8C                                            2863+         DROP    R5
00002E8C  00000000 00000000                         2864          DC      XL16'0000000000000000000000000000000F'       V1
00002E94  00000000 0000000F
00002E9C  00000000 00000000                         2865          DC      XL16'0000000000000000000000000000000D'       V2
00002EA4  00000000 0000000D
                                                    2866
                                                    2867          VRI_G VPSOP, 159, 202, 1, 0              nz=1  pc=1
00002EB0                                            2868+         DS      0FD
00002EB0                       00002EB0             2869+         USING *, R5                  base for test data and test routine
00002EB0  00002ED0                                  2870+T73      DC      A(X73)                address of test routine
00002EB4  0049                                      2871+         DC      H'73'                 test number
00002EB6  00                                        2872+         DC      X'00'
00002EB7  9F                                        2873+         DC      HL1'159'              i3
00002EB8  CA                                        2874+         DC      HL1'202'              i4
00002EB9  01                                        2875+         DC      HL1'1'                m5
00002EBA  00                                        2876+         DC      HL1'0'                cc
00002EBB  07                                        2877+         DC      HL1'7'                cc failed mask
00002EBC  00002F04                                  2878+V2_73    DC      A(RE73+16)            address of v2: 16-byte packed decimal
00002EC0  E5D7E2D6 D7404040                         2879+         DC      CL8'VPSOP'            instruction name
00002EC8  00000010                                  2880+         DC      A(16)                result length
00002ECC  00002EF4                                  2881+REA73    DC      A(RE73)              result address
                                                    2882+*                                     INSTRUCTION UNDER TEST ROUTINE
00002ED0                                            2883+X73      DS      0F
00002ED0  E320 500C 0014                 00002EBC   2884+         LGF     R2, V2_73            get v2
00002ED6  E722 0000 0006                 00000000   2885+         VL      V2, 0(R2)
00002EDC  E612 CA19 F05B                            2886+         VPSOP V1, V2, 159, 202, 1     test instruction
```

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  LOC         OBJECT CODE        ADDR1     ADDR2     STMT

00002EE2  E710 8F10 000E              00001110  2887+         VST    V1,V1OUTPUT         save result
00002EE8  B98D 0020                             2888+         EPSW   R2,R0              exptract psw
00002EEC  5020 8EF4                   000010F4  2889+         ST     R2,CCPSW              to save CC
00002EF0  07FB                                  2890+         BR     R11                return
00002EF4                                        2891+RE73     DC     0F
00002EF4                                        2892+         DROP   R5
00002EF4  00000000 00000000                     2893          DC     XL16'0000000000000000000000000000000F'     V1
00002EFC  00000000 0000000F
00002F04  00000000 00000000                     2894          DC     XL16'0000000000000000000000000000000B'     V2
00002F0C  00000000 0000000B
                                                2895
                                                2896 *------------------------------------------------------
                                                2897 * SC=11 (force negative): nv=1 to avoid data exceptions
                                                2898 *------------------------------------------------------
                                                2899
                                                2900 * V1:nonzero V2:------    PC='-' NZ='â€"'              V1_sign=D  CC=1
                                                2901 * V2:positive  PC=0
                                                2902          VRI_G  VPSOP,159,140,1,1            nz=0  pc=0
00002F18                                        2903+         DS     0FD
00002F18                        00002F18        2904+         USING  *,R5               base for test data and test routine
00002F18  00002F38                              2905+T74      DC     A(X74)             address of test routine
00002F1C  004A                                  2906+         DC     H'74'              test number
00002F1E  00                                    2907+         DC     X'00'
00002F1F  9F                                    2908+         DC     HL1'159'             i3
00002F20  8C                                    2909+         DC     HL1'140'             i4
00002F21  01                                    2910+         DC     HL1'1'               m5
00002F22  01                                    2911+         DC     HL1'1'               cc
00002F23  0B                                    2912+         DC     HL1'11'              cc failed mask
00002F24  00002F6C                              2913+V2_74    DC     A(RE74+16)         address of v2: 16-byte packed decimal
00002F28  E5D7E2D6 D7404040                     2914+         DC     CL8'VPSOP'         instruction name
00002F30  00000010                              2915+         DC     A(16)              result length
00002F34  00002F5C                              2916+REA74    DC     A(RE74)            result address
                                                2917+*                                  INSTRUCTION UNDER TEST ROUTINE
00002F38                                        2918+X74      DS     0F
00002F38  E320 500C 0014              00002F24  2919+         LGF    R2,V2_74           get v2
00002F3E  E722 0000 0006              00000000  2920+         VL     V2,0(R2)
00002F44  E612 8C19 F05B                        2921+         VPSOP  V1,V2,159,140,1     test instruction
00002F4A  E710 8F10 000E              00001110  2922+         VST    V1,V1OUTPUT        save result
00002F50  B98D 0020                             2923+         EPSW   R2,R0              exptract psw
00002F54  5020 8EF4                   000010F4  2924+         ST     R2,CCPSW              to save CC
00002F58  07FB                                  2925+         BR     R11                return
00002F5C                                        2926+RE74     DC     0F
00002F5C                                        2927+         DROP   R5
00002F5C  00000000 00000000                     2928          DC     XL16'0000000000000000000000220000000D'     V1
00002F64  00000022 0000000D
00002F6C  00000000 00000000                     2929          DC     XL16'0000000000000000000000220000000A'     V2
00002F74  00000022 0000000A
                                                2930
                                                2931          VRI_G  VPSOP,159,204,1,1            nz=1  pc=0
00002F80                                        2932+         DS     0FD
00002F80                        00002F80        2933+         USING  *,R5               base for test data and test routine
00002F80  00002FA0                              2934+T75      DC     A(X75)             address of test routine
00002F84  004B                                  2935+         DC     H'75'              test number
00002F86  00                                    2936+         DC     X'00'
00002F87  9F                                    2937+         DC     HL1'159'             i3
00002F88  CC                                    2938+         DC     HL1'204'             i4
```

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  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00002F89  01                                       2939+         DC     HL1'1'            m5
00002F8A  01                                       2940+         DC     HL1'1'            cc
00002F8B  0B                                       2941+         DC     HL1'11'           cc failed mask
00002F8C  00002FD4                                 2942+V2_75    DC     A(RE75+16)        address of v2: 16-byte packed decimal
00002F90  E5D7E2D6 D7404040                        2943+         DC     CL8'VPSOP'        instruction name
00002F98  00000010                                 2944+         DC     A(16)             result length
00002F9C  00002FC4                                 2945+REA75    DC     A(RE75)           result address
                                                   2946+*                                INSTRUCTION UNDER TEST ROUTINE
00002FA0                                           2947+X75      DS     0F
00002FA0  E320 500C 0014              00002F8C     2948+         LGF    R2,V2_75          get v2
00002FA6  E722 0000 0006              00000000     2949+         VL     V2,0(R2)
00002FAC  E612 CC19 F05B                           2950+         VPSOP  V1,V2,159,204,1    test instruction
00002FB2  E710 8F10 000E              00001110     2951+         VST    V1,V10OUTPUT      save result
00002FB8  B98D 0020                                2952+         EPSW   R2,R0             exptract psw
00002FBC  5020 8EF4                   000010F4     2953+         ST     R2,CCPSW             to save CC
00002FC0  07FB                                     2954+         BR     R11               return
00002FC4                                           2955+RE75     DC     0F
00002FC4                                           2956+         DROP   R5
00002FC4  00000000 00000000                        2957         DC     XL16'00000000000000000000220000000D'     V1
00002FCC  00000022 0000000D
00002FD4  00000000 00000000                        2958         DC     XL16'00000000000000000000220000000A'     V2
00002FDC  00000022 0000000A
                                                   2959 * V2:negative  PC=0
                                                   2960          VRI_G  VPSOP,159,140,1,1            nz=0  pc=0
00002FE8                                           2961+         DS     0FD
00002FE8                          00002FE8         2962+         USING  *,R5              base for test data and test routine
00002FE8  00003008                                 2963+T76      DC     A(X76)            address of test routine
00002FEC  004C                                     2964+         DC     H'76'             test number
00002FEE  00                                       2965+         DC     X'00'
00002FEF  9F                                       2966+         DC     HL1'159'          i3
00002FF0  8C                                       2967+         DC     HL1'140'          i4
00002FF1  01                                       2968+         DC     HL1'1'            m5
00002FF2  01                                       2969+         DC     HL1'1'            cc
00002FF3  0B                                       2970+         DC     HL1'11'           cc failed mask
00002FF4  0000303C                                 2971+V2_76    DC     A(RE76+16)        address of v2: 16-byte packed decimal
00002FF8  E5D7E2D6 D7404040                        2972+         DC     CL8'VPSOP'        instruction name
00003000  00000010                                 2973+         DC     A(16)             result length
00003004  0000302C                                 2974+REA76    DC     A(RE76)           result address
                                                   2975+*                                INSTRUCTION UNDER TEST ROUTINE
00003008                                           2976+X76      DS     0F
00003008  E320 500C 0014              00002FF4     2977+         LGF    R2,V2_76          get v2
0000300E  E722 0000 0006              00000000     2978+         VL     V2,0(R2)
00003014  E612 8C19 F05B                           2979+         VPSOP  V1,V2,159,140,1    test instruction
0000301A  E710 8F10 000E              00001110     2980+         VST    V1,V10OUTPUT      save result
00003020  B98D 0020                                2981+         EPSW   R2,R0             exptract psw
00003024  5020 8EF4                   000010F4     2982+         ST     R2,CCPSW             to save CC
00003028  07FB                                     2983+         BR     R11               return
0000302C                                           2984+RE76     DC     0F
0000302C                                           2985+         DROP   R5
0000302C  00000000 00000000                        2986         DC     XL16'00000000000000000000220000000D'     V1
00003034  00000022 0000000D
0000303C  00000000 00000000                        2987         DC     XL16'00000000000000000000220000000D'     V2
00003044  00000022 0000000D
                                                   2988
                                                   2989          VRI_G  VPSOP,159,204,1,1            nz=1  pc=0
00003050                                           2990+         DS     0FD
```

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  LOC        OBJECT CODE      ADDR1      ADDR2      STMT

00003050                      00003050               2991+        USING  *,R5              base for test data and test routine
00003050   00003070                                  2992+T77     DC     A(X77)            address of test routine
00003054   004D                                      2993+        DC     H'77'             test number
00003056   00                                        2994+        DC     X'00'
00003057   9F                                        2995+        DC     HL1'159'          i3
00003058   CC                                        2996+        DC     HL1'204'          i4
00003059   01                                        2997+        DC     HL1'1'            m5
0000305A   01                                        2998+        DC     HL1'1'            cc
0000305B   0B                                        2999+        DC     HL1'11'           cc failed mask
0000305C   000030A4                                  3000+V2_77   DC     A(RE77+16)        address of v2: 16-byte packed decimal
00003060   E5D7E2D6 D7404040                          3001+        DC     CL8'VPSOP'        instruction name
00003068   00000010                                  3002+        DC     A(16)             result length
0000306C   00003094                                  3003+REA77   DC     A(RE77)           result address
                                                     3004+*                                INSTRUCTION UNDER TEST ROUTINE
00003070                                              3005+X77     DS     0F
00003070   E320 500C 0014                 0000305C    3006+        LGF    R2,V2_77          get v2
00003076   E722 0000 0006                 00000000    3007+        VL     V2,0(R2)
0000307C   E612 CC19 F05B                              3008+        VPSOP  V1,V2,159,204,1    test instruction
00003082   E710 8F10 000E                 00001110    3009+        VST    V1,V1OUTPUT       save result
00003088   B98D 0020                                  3010+        EPSW   R2,R0             exptract psw
0000308C   5020 8EF4                      000010F4    3011+        ST     R2,CCPSW              to save CC
00003090   07FB                                       3012+        BR     R11               return
00003094                                              3013+RE77    DC     0F
00003094                                              3014+        DROP   R5
00003094   00000000 00000000                          3015        DC     XL16'00000000000000000000220000000D'      V1
0000309C   00000022 0000000D
000030A4   00000000 00000000                          3016        DC     XL16'00000000000000000000220000000B'      V2
000030AC   00000022 0000000B
                                                     3017 * V2: positive   PC=1
                                                     3018        VRI_G  VPSOP,159,142,1,1           nz=0  pc=1
000030B8                                              3019+        DS     0FD
000030B8                      000030B8                3020+        USING  *,R5              base for test data and test routine
000030B8   000030D8                                  3021+T78     DC     A(X78)            address of test routine
000030BC   004E                                      3022+        DC     H'78'             test number
000030BE   00                                        3023+        DC     X'00'
000030BF   9F                                        3024+        DC     HL1'159'          i3
000030C0   8E                                        3025+        DC     HL1'142'          i4
000030C1   01                                        3026+        DC     HL1'1'            m5
000030C2   01                                        3027+        DC     HL1'1'            cc
000030C3   0B                                        3028+        DC     HL1'11'           cc failed mask
000030C4   0000310C                                  3029+V2_78   DC     A(RE78+16)        address of v2: 16-byte packed decimal
000030C8   E5D7E2D6 D7404040                          3030+        DC     CL8'VPSOP'        instruction name
000030D0   00000010                                  3031+        DC     A(16)             result length
000030D4   000030FC                                  3032+REA78   DC     A(RE78)           result address
                                                     3033+*                                INSTRUCTION UNDER TEST ROUTINE
000030D8                                              3034+X78     DS     0F
000030D8   E320 500C 0014                 000030C4    3035+        LGF    R2,V2_78          get v2
000030DE   E722 0000 0006                 00000000    3036+        VL     V2,0(R2)
000030E4   E612 8E19 F05B                              3037+        VPSOP  V1,V2,159,142,1    test instruction
000030EA   E710 8F10 000E                 00001110    3038+        VST    V1,V1OUTPUT       save result
000030F0   B98D 0020                                  3039+        EPSW   R2,R0             exptract psw
000030F4   5020 8EF4                      000010F4    3040+        ST     R2,CCPSW              to save CC
000030F8   07FB                                       3041+        BR     R11               return
000030FC                                              3042+RE78    DC     0F
000030FC                                              3043+        DROP   R5
000030FC   00000000 00000000                          3044        DC     XL16'00000000000000000000220000000D'      V1
```

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  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

00003104  00000022 0000000D
0000310C  00000000 00000000      3045          DC      XL16'00000000000000000000000220000000A'      V2
00003114  00000022 0000000A
                                 3046
                                 3047          VRI_G  VPSOP, 159, 206, 1, 1              nz=1  pc=1
00003120                         3048+         DS      0FD
00003120                  00003120  3049+      USING  *, R5                      base for test data and test routine
00003120  00003140         3050+T79            DC      A(X79)                     address of test routine
00003124  004F             3051+               DC      H'79'                      test number
00003126  00               3052+               DC      X'00'
00003127  9F               3053+               DC      HL1'159'                   i3
00003128  CE               3054+               DC      HL1'206'                   i4
00003129  01               3055+               DC      HL1'1'                     m5
0000312A  01               3056+               DC      HL1'1'                     cc
0000312B  0B               3057+               DC      HL1'11'                    cc failed mask
0000312C  00003174         3058+V2_79          DC      A(RE79+16)                 address of v2: 16-byte packed decimal
00003130  E5D7E2D6 D7404040  3059+              DC      CL8'VPSOP'                 instruction name
00003138  00000010         3060+               DC      A(16)                      result length
0000313C  00003164         3061+REA79          DC      A(RE79)                    result address
                                 3062+*                                INSTRUCTION UNDER TEST ROUTINE
00003140                         3063+X79       DS      0F
00003140  E320 500C 0014            0000312C  3064+    LGF     R2, V2_79                  get v2
00003146  E722 0000 0006            00000000  3065+    VL      V2, 0(R2)
0000314C  E612 CE19 F05B           3066+       VPSOP   V1, V2, 159, 206, 1         test instruction
00003152  E710 8F10 000E            00001110  3067+    VST     V1, V1OUTPUT               save result
00003158  B98D 0020                3068+       EPSW    R2, R0                     exptract psw
0000315C  5020 8EF4                000010F4  3069+    ST      R2, CCPSW                    to save CC
00003160  07FB                     3070+       BR      R11                        return
00003164                           3071+RE79    DC      0F
00003164                           3072+        DROP    R5
00003164  00000000 00000000      3073          DC      XL16'00000000000000000000000220000000D'      V1
0000316C  00000022 0000000D
00003174  00000000 00000000      3074          DC      XL16'00000000000000000000000220000000A'      V2
0000317C  00000022 0000000A
                                 3075 * V2: negative  PC=1
                                 3076          VRI_G  VPSOP, 159, 142, 1, 1              nz=0  pc=1
00003188                         3077+         DS      0FD
00003188                  00003188  3078+      USING  *, R5                      base for test data and test routine
00003188  000031A8         3079+T80            DC      A(X80)                     address of test routine
0000318C  0050             3080+               DC      H'80'                      test number
0000318E  00               3081+               DC      X'00'
0000318F  9F               3082+               DC      HL1'159'                   i3
00003190  8E               3083+               DC      HL1'142'                   i4
00003191  01               3084+               DC      HL1'1'                     m5
00003192  01               3085+               DC      HL1'1'                     cc
00003193  0B               3086+               DC      HL1'11'                    cc failed mask
00003194  000031DC         3087+V2_80          DC      A(RE80+16)                 address of v2: 16-byte packed decimal
00003198  E5D7E2D6 D7404040  3088+              DC      CL8'VPSOP'                 instruction name
000031A0  00000010         3089+               DC      A(16)                      result length
000031A4  000031CC         3090+REA80          DC      A(RE80)                    result address
                                 3091+*                                INSTRUCTION UNDER TEST ROUTINE
000031A8                         3092+X80       DS      0F
000031A8  E320 500C 0014            00003194  3093+    LGF     R2, V2_80                  get v2
000031AE  E722 0000 0006            00000000  3094+    VL      V2, 0(R2)
000031B4  E612 8E19 F05B           3095+       VPSOP   V1, V2, 159, 142, 1         test instruction
000031BA  E710 8F10 000E            00001110  3096+    VST     V1, V1OUTPUT               save result
```

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  LOC         OBJECT CODE       ADDR1      ADDR2     STMT

000031C0  B98D 0020                                 3097+          EPSW  R2,R0              exptract psw
000031C4  5020 8EF4                       000010F4  3098+          ST    R2,CCPSW               to save CC
000031C8  07FB                                      3099+          BR    R11                return
000031CC                                            3100+RE80      DC    0F
000031CC                                            3101+          DROP  R5
000031CC  00000000 00000000                         3102           DC    XL16'00000000000000000000000220000000D'      V1
000031D4  00000022 0000000D
000031DC  00000000 00000000                         3103           DC    XL16'00000000000000000000000220000000D'      V2
000031E4  00000022 0000000D

                                                    3104
                                                    3105           VRI_G VPSOP,159,206,1,1            nz=1  pc=1
000031F0                                            3106+          DS    0FD
000031F0                                000031F0    3107+          USING *,R5                 base for test data and test routine
000031F0  00003210                                  3108+T81       DC    A(X81)               address of test routine
000031F4  0051                                      3109+          DC    H'81'                test number
000031F6  00                                        3110+          DC    X'00'
000031F7  9F                                        3111+          DC    HL1'159'             i3
000031F8  CE                                        3112+          DC    HL1'206'             i4
000031F9  01                                        3113+          DC    HL1'1'               m5
000031FA  01                                        3114+          DC    HL1'1'               cc
000031FB  0B                                        3115+          DC    HL1'11'              cc failed mask
000031FC  00003244                                  3116+V2_81     DC    A(RE81+16)           address of v2: 16-byte packed decimal
00003200  E5D7E2D6 D7404040                         3117+          DC    CL8'VPSOP'           instruction name
00003208  00000010                                  3118+          DC    A(16)                result length
0000320C  00003234                                  3119+REA81     DC    A(RE81)              result address
                                                    3120+*                                   INSTRUCTION UNDER TEST ROUTINE
00003210                                            3121+X81       DS    0F
00003210  E320 500C 0014        000031FC            3122+          LGF   R2,V2_81             get v2
00003216  E722 0000 0006        00000000            3123+          VL    V2,0(R2)
0000321C  E612 CE19 F05B                            3124+          VPSOP V1,V2,159,206,1        test instruction
00003222  E710 8F10 000E        00001110            3125+          VST   V1,V1OUTPUT          save result
00003228  B98D 0020                                 3126+          EPSW  R2,R0              exptract psw
0000322C  5020 8EF4             000010F4            3127+          ST    R2,CCPSW               to save CC
00003230  07FB                                      3128+          BR    R11                return
00003234                                            3129+RE81      DC    0F
00003234                                            3130+          DROP  R5
00003234  00000000 00000000                         3131           DC    XL16'00000000000000000000000220000000D'      V1
0000323C  00000022 0000000D
00003244  00000000 00000000                         3132           DC    XL16'00000000000000000000000220000000B'      V2
0000324C  00000022 0000000B

                                                    3133
                                                    3134 * V1:zero     V2:------    PC='0' NZ='0'              V1_sign=C  CC=0
                                                    3135 * V2:positive
                                                    3136           VRI_G VPSOP,159,140,1,0            nz=0  pc=0
00003258                                            3137+          DS    0FD
00003258                                00003258    3138+          USING *,R5                 base for test data and test routine
00003258  00003278                                  3139+T82       DC    A(X82)               address of test routine
0000325C  0052                                      3140+          DC    H'82'                test number
0000325E  00                                        3141+          DC    X'00'
0000325F  9F                                        3142+          DC    HL1'159'             i3
00003260  8C                                        3143+          DC    HL1'140'             i4
00003261  01                                        3144+          DC    HL1'1'               m5
00003262  00                                        3145+          DC    HL1'0'               cc
00003263  07                                        3146+          DC    HL1'7'               cc failed mask
00003264  000032AC                                  3147+V2_82     DC    A(RE82+16)           address of v2: 16-byte packed decimal
00003268  E5D7E2D6 D7404040                         3148+          DC    CL8'VPSOP'           instruction name
```

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  LOC        OBJECT CODE      ADDR1    ADDR2    STMT

00003270  00000010                              3149+        DC    A(16)                result length
00003274  0000329C                              3150+REA82   DC    A(RE82)              result address
                                                3151+*                                 INSTRUCTION UNDER TEST ROUTINE
00003278                                        3152+X82     DS    0F
00003278  E320 500C 0014              00003264  3153+        LGF   R2,V2_82             get v2
0000327E  E722 0000 0006              00000000  3154+        VL    V2,0(R2)
00003284  E612 8C19 F05B                        3155+        VPSOP V1,V2,159,140,1       test instruction
0000328A  E710 8F10 000E              00001110  3156+        VST   V1,V10UTPUT          save result
00003290  B98D 0020                             3157+        EPSW  R2,R0                exptract psw
00003294  5020 8EF4                   000010F4  3158+        ST    R2,CCPSW                to save CC
00003298  07FB                                  3159+        BR    R11                  return
0000329C                                        3160+RE82    DC    0F
0000329C                                        3161+        DROP  R5
0000329C  00000000 00000000                     3162         DC    XL16'000000000000000000000000000000000C'      V1
000032A4  00000000 0000000C
000032AC  00000000 00000000                     3163         DC    XL16'000000000000000000000000000000000A'      V2
000032B4  00000000 0000000A

                                                3164 * V2:negative
                                                3165         VRI_G VPSOP,159,140,1,0              nz=0  pc=0
000032C0                                        3166+        DS    0FD
000032C0                      000032C0          3167+        USING *,R5                base for test data and test routine
000032C0  000032E0                              3168+T83     DC    A(X83)               address of test routine
000032C4  0053                                  3169+        DC    H'83'                test number
000032C6  00                                    3170+        DC    X'00'
000032C7  9F                                    3171+        DC    HL1'159'             i3
000032C8  8C                                    3172+        DC    HL1'140'             i4
000032C9  01                                    3173+        DC    HL1'1'               m5
000032CA  00                                    3174+        DC    HL1'0'               cc
000032CB  07                                    3175+        DC    HL1'7'               cc failed mask
000032CC  00003314                              3176+V2_83   DC    A(RE83+16)           address of v2: 16-byte packed decimal
000032D0  E5D7E2D6 D7404040                     3177+        DC    CL8'VPSOP'           instruction name
000032D8  00000010                              3178+        DC    A(16)                result length
000032DC  00003304                              3179+REA83   DC    A(RE83)              result address
                                                3180+*                                 INSTRUCTION UNDER TEST ROUTINE
000032E0                                        3181+X83     DS    0F
000032E0  E320 500C 0014              000032CC  3182+        LGF   R2,V2_83             get v2
000032E6  E722 0000 0006              00000000  3183+        VL    V2,0(R2)
000032EC  E612 8C19 F05B                        3184+        VPSOP V1,V2,159,140,1       test instruction
000032F2  E710 8F10 000E              00001110  3185+        VST   V1,V10UTPUT          save result
000032F8  B98D 0020                             3186+        EPSW  R2,R0                exptract psw
000032FC  5020 8EF4                   000010F4  3187+        ST    R2,CCPSW                to save CC
00003300  07FB                                  3188+        BR    R11                  return
00003304                                        3189+RE83    DC    0F
00003304                                        3190+        DROP  R5
00003304  00000000 00000000                     3191         DC    XL16'000000000000000000000000000000000C'      V1
0000330C  00000000 0000000C
00003314  00000000 00000000                     3192         DC    XL16'000000000000000000000000000000000D'      V2
0000331C  00000000 0000000D

                                                3193
                                                3194 * V1:zero     V2:------    PC='1' NZ='0'                    V1_sign=F  CC=0
                                                3195 * V2:positive
                                                3196         VRI_G VPSOP,159,142,1,0              nz=0  pc=1
00003328                                        3197+        DS    0FD
00003328                      00003328          3198+        USING *,R5                base for test data and test routine
00003328  00003348                              3199+T84     DC    A(X84)               address of test routine
0000332C  0054                                  3200+        DC    H'84'                test number
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  LOC           OBJECT CODE      ADDR1      ADDR2     STMT

0000332E  00                                          3201+           DC     X'00'
0000332F  9F                                          3202+           DC     HL1'159'                    i3
00003330  8E                                          3203+           DC     HL1'142'                    i4
00003331  01                                          3204+           DC     HL1'1'                      m5
00003332  00                                          3205+           DC     HL1'0'                      cc
00003333  07                                          3206+           DC     HL1'7'                      cc failed mask
00003334  0000337C                                    3207+V2_84      DC     A(RE84+16)                  address of v2: 16-byte packed decimal
00003338  E5D7E2D6 D7404040                           3208+           DC     CL8'VPSOP'                  instruction name
00003340  00000010                                    3209+           DC     A(16)                       result length
00003344  0000336C                                    3210+REA84      DC     A(RE84)                     result address
                                                      3211+*                                            INSTRUCTION UNDER TEST ROUTINE
00003348                                              3212+X84        DS     0F
00003348  E320 500C 0014               00003334       3213+           LGF    R2,V2_84                    get v2
0000334E  E722 0000 0006               00000000       3214+           VL     V2,0(R2)
00003354  E612 8E19 F05B                              3215+           VPSOP  V1,V2,159,142,1              test instruction
0000335A  E710 8F10 000E               00001110       3216+           VST    V1,V10UTPUT                 save result
00003360  B98D 0020                                   3217+           EPSW   R2,R0                       exptract psw
00003364  5020 8EF4                    000010F4       3218+           ST     R2,CCPSW                         to save CC
00003368  07FB                                        3219+           BR     R11                         return
0000336C                                              3220+RE84       DC     0F
0000336C                                              3221+           DROP   R5
0000336C  00000000 00000000                           3222            DC     XL16'0000000000000000000000000000000F'       V1
00003374  00000000 0000000F
0000337C  00000000 00000000                           3223            DC     XL16'0000000000000000000000000000000A'       V2
00003384  00000000 0000000A

                                                      3224 * V2: negative
                                                      3225            VRI_G  VPSOP,159,142,1,0                nz=0  pc=1
00003390                                              3226+           DS     0FD
00003390                               00003390       3227+           USING  *,R5                        base for test data and test routine
00003390  000033B0                                    3228+T85        DC     A(X85)                      address of test routine
00003394  0055                                        3229+           DC     H'85'                       test number
00003396  00                                          3230+           DC     X'00'
00003397  9F                                          3231+           DC     HL1'159'                    i3
00003398  8E                                          3232+           DC     HL1'142'                    i4
00003399  01                                          3233+           DC     HL1'1'                      m5
0000339A  00                                          3234+           DC     HL1'0'                      cc
0000339B  07                                          3235+           DC     HL1'7'                      cc failed mask
0000339C  000033E4                                    3236+V2_85      DC     A(RE85+16)                  address of v2: 16-byte packed decimal
000033A0  E5D7E2D6 D7404040                           3237+           DC     CL8'VPSOP'                  instruction name
000033A8  00000010                                    3238+           DC     A(16)                       result length
000033AC  000033D4                                    3239+REA85      DC     A(RE85)                     result address
                                                      3240+*                                            INSTRUCTION UNDER TEST ROUTINE
000033B0                                              3241+X85        DS     0F
000033B0  E320 500C 0014               0000339C       3242+           LGF    R2,V2_85                    get v2
000033B6  E722 0000 0006               00000000       3243+           VL     V2,0(R2)
000033BC  E612 8E19 F05B                              3244+           VPSOP  V1,V2,159,142,1              test instruction
000033C2  E710 8F10 000E               00001110       3245+           VST    V1,V10UTPUT                 save result
000033C8  B98D 0020                                   3246+           EPSW   R2,R0                       exptract psw
000033CC  5020 8EF4                    000010F4       3247+           ST     R2,CCPSW                         to save CC
000033D0  07FB                                        3248+           BR     R11                         return
000033D4                                              3249+RE85       DC     0F
000033D4                                              3250+           DROP   R5
000033D4  00000000 00000000                           3251            DC     XL16'0000000000000000000000000000000F'       V1
000033DC  00000000 0000000F
000033E4  00000000 00000000                           3252            DC     XL16'0000000000000000000000000000000D'       V2
000033EC  00000000 0000000D
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  LOC         OBJECT CODE     ADDR1     ADDR2    STMT

                                                 3253
                                                 3254 * V1:zero    V2:------   PC='-'  NZ='1'                V1_sign=d  CC=0
                                                 3255 * V2:positive
                                                 3256          VRI_G VPSOP,159,204,1,0          nz=1  pc=0
                                                 3257+         DS    0FD
000033F8                        000033F8         3258+         USING *,R5                base for test data and test routine
000033F8  00003418                               3259+T86      DC    A(X86)              address of test routine
000033FC  0056                                   3260+         DC    H'86'               test number
000033FE  00                                     3261+         DC    X'00'
000033FF  9F                                     3262+         DC    HL1'159'            i3
00003400  CC                                     3263+         DC    HL1'204'            i4
00003401  01                                     3264+         DC    HL1'1'              m5
00003402  00                                     3265+         DC    HL1'0'              cc
00003403  07                                     3266+         DC    HL1'7'              cc failed mask
00003404  0000344C                               3267+V2_86    DC    A(RE86+16)          address of v2: 16-byte packed decimal
00003408  E5D7E2D6 D7404040                      3268+         DC    CL8'VPSOP'          instruction name
00003410  00000010                               3269+         DC    A(16)               result length
00003414  0000343C                               3270+REA86    DC    A(RE86)             result address
                                                 3271+*                                  INSTRUCTION UNDER TEST ROUTINE
00003418                                         3272+X86      DS    0F
00003418  E320 500C 0014        00003404         3273+         LGF   R2,V2_86            get v2
0000341E  E722 0000 0006        00000000         3274+         VL    V2,0(R2)
00003424  E612 CC19 F05B                         3275+         VPSOP V1,V2,159,204,1      test instruction
0000342A  E710 8F10 000E        00001110         3276+         VST   V1,V10UTPUT         save result
00003430  B98D 0020                              3277+         EPSW  R2,R0               exptract psw
00003434  5020 8EF4             000010F4         3278+         ST    R2,CCPSW                to save CC
00003438  07FB                                   3279+         BR    R11                 return
0000343C                                         3280+RE86     DC    0F
0000343C                                         3281+         DROP  R5
0000343C  00000000 00000000                      3282          DC    XL16'000000000000000000000000000000D'     V1
00003444  00000000 0000000D
0000344C  00000000 00000000                      3283          DC    XL16'00000000000000000000000000000A'      V2
00003454  00000000 0000000A
                                                 3284 * V2:negative
                                                 3285          VRI_G VPSOP,159,204,1,0          nz=1  pc=0
00003460                                         3286+         DS    0FD
00003460                        00003460         3287+         USING *,R5                base for test data and test routine
00003460  00003480                               3288+T87      DC    A(X87)              address of test routine
00003464  0057                                   3289+         DC    H'87'               test number
00003466  00                                     3290+         DC    X'00'
00003467  9F                                     3291+         DC    HL1'159'            i3
00003468  CC                                     3292+         DC    HL1'204'            i4
00003469  01                                     3293+         DC    HL1'1'              m5
0000346A  00                                     3294+         DC    HL1'0'              cc
0000346B  07                                     3295+         DC    HL1'7'              cc failed mask
0000346C  000034B4                               3296+V2_87    DC    A(RE87+16)          address of v2: 16-byte packed decimal
00003470  E5D7E2D6 D7404040                      3297+         DC    CL8'VPSOP'          instruction name
00003478  00000010                               3298+         DC    A(16)               result length
0000347C  000034A4                               3299+REA87    DC    A(RE87)             result address
                                                 3300+*                                  INSTRUCTION UNDER TEST ROUTINE
00003480                                         3301+X87      DS    0F
00003480  E320 500C 0014        0000346C         3302+         LGF   R2,V2_87            get v2
00003486  E722 0000 0006        00000000         3303+         VL    V2,0(R2)
0000348C  E612 CC19 F05B                         3304+         VPSOP V1,V2,159,204,1      test instruction
00003492  E710 8F10 000E        00001110         3305+         VST   V1,V10UTPUT         save result
00003498  B98D 0020                              3306+         EPSW  R2,R0               exptract psw
```

```
    LOC          OBJECT CODE      ADDR1     ADDR2     STMT

0000349C   5020 8EF4                       000010F4   3307+          ST      R2,CCPSW              to save CC
000034A0   07FB                                       3308+          BR      R11           return
000034A4                                              3309+RE87      DC      0F
000034A4                                              3310+          DROP    R5
000034A4   00000000 00000000                          3311           DC      XL16'000000000000000000000000000000D'      V1
000034AC   00000000 0000000D
000034B4   00000000 00000000                          3312           DC      XL16'000000000000000000000000000000B'      V2
000034BC   00000000 0000000B
                                                      3313
                                                      3314 * V2:positive
                                                      3315           VRI_G  VPSOP,159,206,1,0          nz=1  pc=1
000034C8                                              3316+          DS      0FD
000034C8                             000034C8          3317+          USING   *,R5          base for test data and test routine
000034C8   000034E8                                   3318+T88       DC      A(X88)        address of test routine
000034CC   0058                                       3319+          DC      H'88'         test number
000034CE   00                                         3320+          DC      X'00'
000034CF   9F                                         3321+          DC      HL1'159'      i3
000034D0   CE                                         3322+          DC      HL1'206'      i4
000034D1   01                                         3323+          DC      HL1'1'        m5
000034D2   00                                         3324+          DC      HL1'0'        cc
000034D3   07                                         3325+          DC      HL1'7'        cc failed mask
000034D4   0000351C                                   3326+V2_88     DC      A(RE88+16)    address of v2: 16-byte packed decimal
000034D8   E5D7E2D6 D7404040                          3327+          DC      CL8'VPSOP'    instruction name
000034E0   00000010                                   3328+          DC      A(16)         result length
000034E4   0000350C                                   3329+REA88     DC      A(RE88)       result address
                                                      3330+*                               INSTRUCTION UNDER TEST ROUTINE
000034E8                                              3331+X88       DS      0F
000034E8   E320 500C 0014          000034D4            3332+          LGF     R2,V2_88      get v2
000034EE   E722 0000 0006          00000000            3333+          VL      V2,0(R2)
000034F4   E612 CE19 F05B                             3334+          VPSOP   V1,V2,159,206,1    test instruction
000034FA   E710 8F10 000E          00001110            3335+          VST     V1,V1OUTPUT   save result
00003500   B98D 0020                                  3336+          EPSW    R2,R0         exptract psw
00003504   5020 8EF4               000010F4            3337+          ST      R2,CCPSW              to save CC
00003508   07FB                                       3338+          BR      R11           return
0000350C                                              3339+RE88      DC      0F
0000350C                                              3340+          DROP    R5
0000350C   00000000 00000000                          3341           DC      XL16'000000000000000000000000000000D'      V1
00003514   00000000 0000000D
0000351C   00000000 00000000                          3342           DC      XL16'000000000000000000000000000000A'      V2
00003524   00000000 0000000A
                                                      3343 * V2:negative
                                                      3344           VRI_G  VPSOP,159,206,1,0          nz=1  pc=1
00003530                                              3345+          DS      0FD
00003530                             00003530          3346+          USING   *,R5          base for test data and test routine
00003530   00003550                                   3347+T89       DC      A(X89)        address of test routine
00003534   0059                                       3348+          DC      H'89'         test number
00003536   00                                         3349+          DC      X'00'
00003537   9F                                         3350+          DC      HL1'159'      i3
00003538   CE                                         3351+          DC      HL1'206'      i4
00003539   01                                         3352+          DC      HL1'1'        m5
0000353A   00                                         3353+          DC      HL1'0'        cc
0000353B   07                                         3354+          DC      HL1'7'        cc failed mask
0000353C   00003584                                   3355+V2_89     DC      A(RE89+16)    address of v2: 16-byte packed decimal
00003540   E5D7E2D6 D7404040                          3356+          DC      CL8'VPSOP'    instruction name
00003548   00000010                                   3357+          DC      A(16)         result length
0000354C   00003574                                   3358+REA89     DC      A(RE89)       result address
```

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  LOC          OBJECT CODE        ADDR1      ADDR2      STMT

                                                        3359+*                                    INSTRUCTION UNDER TEST ROUTINE
00003550                                                3360+X89        DS      0F
00003550    E320 500C 0014                 0000353C     3361+           LGF     R2,V2_89              get v2
00003556    E722 0000 0006                 00000000     3362+           VL      V2,0(R2)
0000355C    E612 CE19 F05B                              3363+           VPSOP   V1,V2,159,206,1       test instruction
00003562    E710 8F10 000E                 00001110     3364+           VST     V1,V10UTPUT          save result
00003568    B98D 0020                                   3365+           EPSW    R2,R0               exptract psw
0000356C    5020 8EF4                      000010F4     3366+           ST      R2,CCPSW                 to save CC
00003570    07FB                                        3367+           BR      R11                 return
00003574                                                3368+RE89       DC      0F
00003574                                                3369+           DROP    R5
00003574    00000000 00000000                           3370            DC      XL16'0000000000000000000000000000000D'    V1
0000357C    00000000 0000000D
00003584    00000000 00000000                           3371            DC      XL16'0000000000000000000000000000000B'    V2
0000358C    00000000 0000000B
                                                        3372
                                                        3373 *-------------------------------------------------
                                                        3374 * SOME cc=3 (overflow) tests with rdc=4
                                                        3375 *-------------------------------------------------
                                                        3376 * V1:zero  V2:positive   PC='0' NZ='â€"'              V1_sign=C  CC=0
                                                        3377            VRI_G  VPSOP,132,128,1,3           nz=0  pc=0
00003598                                                3378+           DS      0FD
00003598                            00003598            3379+           USING   *,R5                 base for test data and test routine
00003598    000035B8                                    3380+T90        DC      A(X90)               address of test routine
0000359C    005A                                        3381+           DC      H'90'                test number
0000359E    00                                          3382+           DC      X'00'
0000359F    84                                          3383+           DC      HL1'132'             i3
000035A0    80                                          3384+           DC      HL1'128'             i4
000035A1    01                                          3385+           DC      HL1'1'               m5
000035A2    03                                          3386+           DC      HL1'3'               cc
000035A3    0E                                          3387+           DC      HL1'14'              cc failed mask
000035A4    000035EC                                    3388+V2_90      DC      A(RE90+16)           address of v2: 16-byte packed decimal
000035A8    E5D7E2D6 D7404040                           3389+           DC      CL8'VPSOP'           instruction name
000035B0    00000010                                    3390+           DC      A(16)                result length
000035B4    000035DC                                    3391+REA90      DC      A(RE90)              result address
                                                        3392+*                                    INSTRUCTION UNDER TEST ROUTINE
000035B8                                                3393+X90        DS      0F
000035B8    E320 500C 0014                 000035A4     3394+           LGF     R2,V2_90             get v2
000035BE    E722 0000 0006                 00000000     3395+           VL      V2,0(R2)
000035C4    E612 8018 405B                              3396+           VPSOP   V1,V2,132,128,1       test instruction
000035CA    E710 8F10 000E                 00001110     3397+           VST     V1,V10UTPUT          save result
000035D0    B98D 0020                                   3398+           EPSW    R2,R0               exptract psw
000035D4    5020 8EF4                      000010F4     3399+           ST      R2,CCPSW                 to save CC
000035D8    07FB                                        3400+           BR      R11                 return
000035DC                                                3401+RE90       DC      0F
000035DC                                                3402+           DROP    R5
000035DC    00000000 00000000                           3403            DC      XL16'0000000000000000000000000000000C'    V1
000035E4    00000000 0000000C
000035EC    00000000 00009990                           3404            DC      XL16'0000000000009990000000000000000F'    V2
000035F4    00000000 0000000F
                                                        3405
                                                        3406 * SC=01 (complement): nv=1 to avoid data exceptions
                                                        3407 * V1:zero   V2:positive   PC='0' NZ='0'              V1_sign=C  CC=0
                                                        3408            VRI_G  VPSOP,132,132,1,3           nz=0  pc=0
00003600                                                3409+           DS      0FD
00003600                            00003600            3410+           USING   *,R5                 base for test data and test routine
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT
00003600	00003620			3411+T91	DC	A(X91)	address of test routine
00003604	005B			3412+	DC	H'91'	test number
00003606	00			3413+	DC	X'00'	
00003607	84			3414+	DC	HL1'132'	i3
00003608	84			3415+	DC	HL1'132'	i4
00003609	01			3416+	DC	HL1'1'	m5
0000360A	03			3417+	DC	HL1'3'	cc
0000360B	0E			3418+	DC	HL1'14'	cc failed mask
0000360C	00003654			3419+V2_91	DC	A(RE91+16)	address of v2: 16-byte packed decimal
00003610	E5D7E2D6 D7404040			3420+	DC	CL8'VPSOP'	instruction name
00003618	00000010			3421+	DC	A(16)	result length
0000361C	00003644			3422+REA91	DC	A(RE91)	result address
				3423+*			INSTRUCTION UNDER TEST ROUTINE
00003620				3424+X91	DS	0F	
00003620	E320 500C 0014		0000360C	3425+	LGF	R2,V2_91	get v2
00003626	E722 0000 0006		00000000	3426+	VL	V2,0(R2)	
0000362C	E612 8418 405B			3427+	VPSOP	V1,V2,132,132,1	test instruction
00003632	E710 8F10 000E		00001110	3428+	VST	V1,V10UTPUT	save result
00003638	B98D 0020			3429+	EPSW	R2,R0	exptract psw
0000363C	5020 8EF4		000010F4	3430+	ST	R2,CCPSW	to save CC
00003640	07FB			3431+	BR	R11	return
00003644				3432+RE91	DC	0F	
00003644				3433+	DROP	R5	
00003644	00000000 00000000			3434	DC	XL16'0000000000000000000000000000000C'	V1
0000364C	00000000 0000000C						
00003654	00000000 00009990			3435	DC	XL16'0000000000099900000000000000000A'	V2
0000365C	00000000 0000000A						
				3436			
				3437 * SC=10 (force positive): nv=1 to avoid data exceptions			
				3438 * V1:zero V2:------ PC='0' NZ='â€"' V1_sign=C CC=0			
				3439 * V2:positive			
				3440	VRI_G VPSOP, 132, 136, 1, 3		nz=0 pc=0
00003668				3441+	DS	0FD	
00003668		00003668		3442+	USING	*,R5	base for test data and test routine
00003668	00003688			3443+T92	DC	A(X92)	address of test routine
0000366C	005C			3444+	DC	H'92'	test number
0000366E	00			3445+	DC	X'00'	
0000366F	84			3446+	DC	HL1'132'	i3
00003670	88			3447+	DC	HL1'136'	i4
00003671	01			3448+	DC	HL1'1'	m5
00003672	03			3449+	DC	HL1'3'	cc
00003673	0E			3450+	DC	HL1'14'	cc failed mask
00003674	000036BC			3451+V2_92	DC	A(RE92+16)	address of v2: 16-byte packed decimal
00003678	E5D7E2D6 D7404040			3452+	DC	CL8'VPSOP'	instruction name
00003680	00000010			3453+	DC	A(16)	result length
00003684	000036AC			3454+REA92	DC	A(RE92)	result address
				3455+*			INSTRUCTION UNDER TEST ROUTINE
00003688				3456+X92	DS	0F	
00003688	E320 500C 0014		00003674	3457+	LGF	R2,V2_92	get v2
0000368E	E722 0000 0006		00000000	3458+	VL	V2,0(R2)	
00003694	E612 8818 405B			3459+	VPSOP	V1,V2,132,136,1	test instruction
0000369A	E710 8F10 000E		00001110	3460+	VST	V1,V10UTPUT	save result
000036A0	B98D 0020			3461+	EPSW	R2,R0	exptract psw
000036A4	5020 8EF4		000010F4	3462+	ST	R2,CCPSW	to save CC
000036A8	07FB			3463+	BR	R11	return
000036AC				3464+RE92	DC	0F	

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  LOC         OBJECT CODE      ADDR1      ADDR2      STMT

000036AC                                            3465+          DROP  R5
000036AC   00000000 00000000                        3466           DC    XL16'0000000000000000000000000000000C'      V1
000036B4   00000000 0000000C
000036BC   00000000 00000999                        3467           DC    XL16'0000000000000999000000000000000A'      V2
000036C4   00000000 0000000A
                                                    3468
                                                    3469 * SC=11 (force negative): nv=1 to avoid data exceptions
                                                    3470 * V1:zero     V2:------    PC='0' NZ='0'                V1_sign=C  CC=0
                                                    3471 * V2:positive
                                                    3472           VRI_G VPSOP,132,140,1,3           nz=0   pc=0
000036D0                                            3473+          DS    0FD
000036D0                       000036D0             3474+          USING *,R5                    base for test data and test routine
000036D0   000036F0                                 3475+T93       DC    A(X93)                   address of test routine
000036D4   005D                                     3476+          DC    H'93'                    test number
000036D6   00                                       3477+          DC    X'00'
000036D7   84                                       3478+          DC    HL1'132'                 i3
000036D8   8C                                       3479+          DC    HL1'140'                 i4
000036D9   01                                       3480+          DC    HL1'1'                   m5
000036DA   03                                       3481+          DC    HL1'3'                   cc
000036DB   0E                                       3482+          DC    HL1'14'                  cc failed mask
000036DC   00003724                                 3483+V2_93     DC    A(RE93+16)               address of v2: 16-byte packed decimal
000036E0   E5D7E2D6 D7404040                         3484+          DC    CL8'VPSOP'               instruction name
000036E8   00000010                                 3485+          DC    A(16)                    result length
000036EC   00003714                                 3486+REA93     DC    A(RE93)                  result address
                                                    3487+*                                        INSTRUCTION UNDER TEST ROUTINE
000036F0                                            3488+X93       DS    0F
000036F0   E320 500C 0014            000036DC       3489+          LGF   R2,V2_93                 get v2
000036F6   E722 0000 0006            00000000       3490+          VL    V2,0(R2)
000036FC   E612 8C18 405B                           3491+          VPSOP V1,V2,132,140,1            test instruction
00003702   E710 8F10 000E            00001110       3492+          VST   V1,V10UTPUT              save result
00003708   B98D 0020                                3493+          EPSW  R2,R0                    exptract psw
0000370C   5020 8EF4                 000010F4       3494+          ST    R2,CCPSW                    to save CC
00003710   07FB                                     3495+          BR    R11                      return
00003714                                            3496+RE93      DC    0F
00003714                                            3497+          DROP  R5
00003714   00000000 00000000                        3498           DC    XL16'0000000000000000000000000000000C'      V1
0000371C   00000000 0000000C
00003724   00000000 00000000                        3499           DC    XL16'0000000000000999000000000000000A'      V2
0000372C   99900000 0000000A
                                                    3500
                                                    3501 *----------------------------------------------------
                                                    3502 * SOME cc=3 (overflow) tests with rdc=7
                                                    3503 *----------------------------------------------------
                                                    3504 * SC=00 (maintain): nv=1 to avoid data exceptions
                                                    3505 * V1:nonzero V2:positive   PC='0' NZ='â€"'              V1_sign=C  CC=2
                                                    3506           VRI_G VPSOP,135,128,1,3           nz=0
00003738                                            3507+          DS    0FD
00003738                       00003738             3508+          USING *,R5                    base for test data and test routine
00003738   00003758                                 3509+T94       DC    A(X94)                   address of test routine
0000373C   005E                                     3510+          DC    H'94'                    test number
0000373E   00                                       3511+          DC    X'00'
0000373F   87                                       3512+          DC    HL1'135'                 i3
00003740   80                                       3513+          DC    HL1'128'                 i4
00003741   01                                       3514+          DC    HL1'1'                   m5
00003742   03                                       3515+          DC    HL1'3'                   cc
00003743   0E                                       3516+          DC    HL1'14'                  cc failed mask
```

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  LOC           OBJECT CODE      ADDR1     ADDR2     STMT

00003744    0000378C                                3517+V2_94      DC      A(RE94+16)         address of v2: 16-byte packed decimal
00003748    E5D7E2D6 D7404040                        3518+           DC      CL8' VPSOP'        instruction name
00003750    00000010                                 3519+           DC      A(16)              result length
00003754    0000377C                                 3520+REA94      DC      A(RE94)            result address
                                                     3521+*                                     INSTRUCTION UNDER TEST ROUTINE
00003758                                             3522+X94        DS      0F
00003758    E320 500C 0014                00003744   3523+           LGF     R2,V2_94           get v2
0000375E    E722 0000 0006                00000000   3524+           VL      V2,0(R2)
00003764    E612 8018 705B                           3525+           VPSOP   V1,V2,135,128,1     test instruction
0000376A    E710 8F10 000E                00001110   3526+           VST     V1,V10UTPUT        save result
00003770    B98D 0020                                3527+           EPSW    R2,R0              exptract psw
00003774    5020 8EF4                     000010F4   3528+           ST      R2,CCPSW                to save CC
00003778    07FB                                     3529+           BR      R11                return
0000377C                                             3530+RE94       DC      0F
0000377C                                             3531+           DROP    R5
0000377C    00000000 00000000                        3532            DC      XL16' 0000000000000000000000002000000C'       V1
00003784    00000000 2000000C
0000378C    00000000 00000000                        3533            DC      XL16' 00000000000000000000000222000000F'      V2
00003794    00000022 2000000F

                                                     3534
                                                     3535 * SC=01 (complement): nv=1 to avoid data exceptions
                                                     3536 * V1:nonzero V2:positive   PC='-' NZ='â€"'              V1_sign=D  CC=1
                                                     3537         VRI_G VPSOP, 135, 132, 1, 3          nz=0   pc=0
000037A0                                             3538+          DS      0FD
000037A0                       000037A0              3539+          USING   *,R5               base for test data and test routine
000037A0    000037C0                                 3540+T95       DC      A(X95)             address of test routine
000037A4    005F                                     3541+          DC      H' 95'             test number
000037A6    00                                       3542+          DC      X' 00'
000037A7    87                                       3543+          DC      HL1'135'           i3
000037A8    84                                       3544+          DC      HL1'132'           i4
000037A9    01                                       3545+          DC      HL1'1'             m5
000037AA    03                                       3546+          DC      HL1'3'             cc
000037AB    0E                                       3547+          DC      HL1'14'            cc failed mask
000037AC    000037F4                                 3548+V2_95     DC      A(RE95+16)         address of v2: 16-byte packed decimal
000037B0    E5D7E2D6 D7404040                        3549+          DC      CL8' VPSOP'        instruction name
000037B8    00000010                                 3550+          DC      A(16)              result length
000037BC    000037E4                                 3551+REA95     DC      A(RE95)            result address
                                                     3552+*                                     INSTRUCTION UNDER TEST ROUTINE
000037C0                                             3553+X95       DS      0F
000037C0    E320 500C 0014                000037AC   3554+          LGF     R2,V2_95           get v2
000037C6    E722 0000 0006                00000000   3555+          VL      V2,0(R2)
000037CC    E612 8418 705B                           3556+          VPSOP   V1,V2,135,132,1     test instruction
000037D2    E710 8F10 000E                00001110   3557+          VST     V1,V10UTPUT        save result
000037D8    B98D 0020                                3558+          EPSW    R2,R0              exptract psw
000037DC    5020 8EF4                     000010F4   3559+          ST      R2,CCPSW                to save CC
000037E0    07FB                                     3560+          BR      R11                return
000037E4                                             3561+RE95      DC      0F
000037E4                                             3562+          DROP    R5
000037E4    00000000 00000000                        3563           DC      XL16' 0000000000000000000000002000000D'       V1
000037EC    00000000 2000000D
000037F4    00000000 00000000                        3564           DC      XL16' 00000000000000000000000222000000C'      V2
000037FC    00000022 2000000C

                                                     3565
                                                     3566 * SC=10 (force positive): nv=1 to avoid data exceptions
                                                     3567 * V1:nonzero V2:------   PC='0' NZ='â€"'              V1_sign=C  CC=2
                                                     3568 * V2:positive
```

```
   LOC          OBJECT CODE      ADDR1      ADDR2      STMT


                                                       3569              VRI_G VPSOP, 135, 136, 1, 3          nz=0  pc=0
00003808                                               3570+             DS    0FD
00003808                         00003808              3571+             USING *, R5                    base for test data and test routine
00003808    00003828                                   3572+T96          DC    A(X96)                   address of test routine
0000380C    0060                                       3573+             DC    H'96'                    test number
0000380E    00                                         3574+             DC    X'00'
0000380F    87                                         3575+             DC    HL1'135'                 i3
00003810    88                                         3576+             DC    HL1'136'                 i4
00003811    01                                         3577+             DC    HL1'1'                   m5
00003812    03                                         3578+             DC    HL1'3'                   cc
00003813    0E                                         3579+             DC    HL1'14'                  cc failed mask
00003814    0000385C                                   3580+V2_96        DC    A(RE96+16)               address of v2: 16-byte packed decimal
00003818    E5D7E2D6 D7404040                           3581+             DC    CL8'VPSOP'               instruction name
00003820    00000010                                   3582+             DC    A(16)                    result length
00003824    0000384C                                   3583+REA96        DC    A(RE96)                  result address
                                                       3584+*                                           INSTRUCTION UNDER TEST ROUTINE
00003828                                               3585+X96          DS    0F
00003828    E320 500C 0014                 00003814    3586+             LGF   R2, V2_96                get v2
0000382E    E722 0000 0006                 00000000    3587+             VL    V2, 0(R2)
00003834    E612 8818 705B                             3588+             VPSOP V1, V2, 135, 136, 1        test instruction
0000383A    E710 8F10 000E                 00001110    3589+             VST   V1, V10UTPUT             save result
00003840    B98D 0020                                  3590+             EPSW  R2, R0                   exptract psw
00003844    5020 8EF4                      000010F4    3591+             ST    R2, CCPSW                   to save CC
00003848    07FB                                       3592+             BR    R11                      return
0000384C                                               3593+RE96         DC    0F
0000384C                                               3594+             DROP  R5
0000384C    00000000 00000000                           3595              DC    XL16'000000000000000000000002000000C'       V1
00003854    00000000 2000000C
0000385C    00000000 00000000                           3596              DC    XL16'00000000000000000000000222000000A'      V2
00003864    00000022 2000000A
                                                       3597
                                                       3598 * SC=11 (force negative): nv=1 to avoid data exceptions
                                                       3599 * V1: nonzero V2: ------    PC='-'  NZ='â€"'                  V1_sign=D  CC=1
                                                       3600 * V2: positive  PC=0
                                                       3601              VRI_G VPSOP, 135, 140, 1, 3          nz=0  pc=0
00003870                                               3602+             DS    0FD
00003870                         00003870              3603+             USING *, R5                    base for test data and test routine
00003870    00003890                                   3604+T97          DC    A(X97)                   address of test routine
00003874    0061                                       3605+             DC    H'97'                    test number
00003876    00                                         3606+             DC    X'00'
00003877    87                                         3607+             DC    HL1'135'                 i3
00003878    8C                                         3608+             DC    HL1'140'                 i4
00003879    01                                         3609+             DC    HL1'1'                   m5
0000387A    03                                         3610+             DC    HL1'3'                   cc
0000387B    0E                                         3611+             DC    HL1'14'                  cc failed mask
0000387C    000038C4                                   3612+V2_97        DC    A(RE97+16)               address of v2: 16-byte packed decimal
00003880    E5D7E2D6 D7404040                           3613+             DC    CL8'VPSOP'               instruction name
00003888    00000010                                   3614+             DC    A(16)                    result length
0000388C    000038B4                                   3615+REA97        DC    A(RE97)                  result address
                                                       3616+*                                           INSTRUCTION UNDER TEST ROUTINE
00003890                                               3617+X97          DS    0F
00003890    E320 500C 0014                 0000387C    3618+             LGF   R2, V2_97                get v2
00003896    E722 0000 0006                 00000000    3619+             VL    V2, 0(R2)
0000389C    E612 8C18 705B                             3620+             VPSOP V1, V2, 135, 140, 1        test instruction
000038A2    E710 8F10 000E                 00001110    3621+             VST   V1, V10UTPUT             save result
000038A8    B98D 0020                                  3622+             EPSW  R2, R0                   exptract psw
```

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  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

000038AC  5020 8EF4                   000010F4   3623+          ST     R2,CCPSW              to save CC
000038B0  07FB                                   3624+          BR     R11             return
000038B4                                         3625+RE97      DC     0F
000038B4                                         3626+          DROP   R5
000038B4  00000000 00000000                      3627           DC     XL16'0000000000000000000000002000000D'    V1
000038BC  00000000 2000000D
000038C4  00000000 00000000                      3628           DC     XL16'00000000000000000000000222000000A'    V2
000038CC  00000022 2000000A
                                                 3629
                                                 3630 *+++++++++++++++++++++++++++++++++++++
                                                 3631 *test
                                                 3632
000038D4  00000000                               3633           DC     F'0'       END OF TABLE
000038D8  00000000                               3634           DC     F'0'
                                                 3635 *
                                                 3636 * table of pointers to individual load test
                                                 3637 *
000038DC                                         3638 E6TESTS   DS     0F
                                                 3639           PTTABLE
000038DC                                         3640+TTABLE    DS     0F
000038DC  00001170                               3641+          DC     A(T1)        address of test
000038E0  000011D8                               3642+          DC     A(T2)        address of test
000038E4  00001240                               3643+          DC     A(T3)        address of test
000038E8  000012A8                               3644+          DC     A(T4)        address of test
000038EC  00001310                               3645+          DC     A(T5)        address of test
000038F0  00001378                               3646+          DC     A(T6)        address of test
000038F4  000013E0                               3647+          DC     A(T7)        address of test
000038F8  00001448                               3648+          DC     A(T8)        address of test
000038FC  000014B0                               3649+          DC     A(T9)        address of test
00003900  00001518                               3650+          DC     A(T10)       address of test
00003904  00001580                               3651+          DC     A(T11)       address of test
00003908  000015E8                               3652+          DC     A(T12)       address of test
0000390C  00001650                               3653+          DC     A(T13)       address of test
00003910  000016B8                               3654+          DC     A(T14)       address of test
00003914  00001720                               3655+          DC     A(T15)       address of test
00003918  00001788                               3656+          DC     A(T16)       address of test
0000391C  000017F0                               3657+          DC     A(T17)       address of test
00003920  00001858                               3658+          DC     A(T18)       address of test
00003924  000018C0                               3659+          DC     A(T19)       address of test
00003928  00001928                               3660+          DC     A(T20)       address of test
0000392C  00001990                               3661+          DC     A(T21)       address of test
00003930  000019F8                               3662+          DC     A(T22)       address of test
00003934  00001A60                               3663+          DC     A(T23)       address of test
00003938  00001AC8                               3664+          DC     A(T24)       address of test
0000393C  00001B30                               3665+          DC     A(T25)       address of test
00003940  00001B98                               3666+          DC     A(T26)       address of test
00003944  00001C00                               3667+          DC     A(T27)       address of test
00003948  00001C68                               3668+          DC     A(T28)       address of test
0000394C  00001CD0                               3669+          DC     A(T29)       address of test
00003950  00001D38                               3670+          DC     A(T30)       address of test
00003954  00001DA0                               3671+          DC     A(T31)       address of test
00003958  00001E08                               3672+          DC     A(T32)       address of test
0000395C  00001E70                               3673+          DC     A(T33)       address of test
00003960  00001ED8                               3674+          DC     A(T34)       address of test
00003964  00001F40                               3675+          DC     A(T35)       address of test
00003968  00001FA8                               3676+          DC     A(T36)       address of test
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
0000396C	00002010			3677+	DC	A(T37)	address of test
00003970	00002078			3678+	DC	A(T38)	address of test
00003974	000020E0			3679+	DC	A(T39)	address of test
00003978	00002148			3680+	DC	A(T40)	address of test
0000397C	000021B0			3681+	DC	A(T41)	address of test
00003980	00002218			3682+	DC	A(T42)	address of test
00003984	00002280			3683+	DC	A(T43)	address of test
00003988	000022E8			3684+	DC	A(T44)	address of test
0000398C	00002350			3685+	DC	A(T45)	address of test
00003990	000023B8			3686+	DC	A(T46)	address of test
00003994	00002420			3687+	DC	A(T47)	address of test
00003998	00002488			3688+	DC	A(T48)	address of test
0000399C	000024F0			3689+	DC	A(T49)	address of test
000039A0	00002558			3690+	DC	A(T50)	address of test
000039A4	000025C0			3691+	DC	A(T51)	address of test
000039A8	00002628			3692+	DC	A(T52)	address of test
000039AC	00002690			3693+	DC	A(T53)	address of test
000039B0	000026F8			3694+	DC	A(T54)	address of test
000039B4	00002760			3695+	DC	A(T55)	address of test
000039B8	000027C8			3696+	DC	A(T56)	address of test
000039BC	00002830			3697+	DC	A(T57)	address of test
000039C0	00002898			3698+	DC	A(T58)	address of test
000039C4	00002900			3699+	DC	A(T59)	address of test
000039C8	00002968			3700+	DC	A(T60)	address of test
000039CC	000029D0			3701+	DC	A(T61)	address of test
000039D0	00002A38			3702+	DC	A(T62)	address of test
000039D4	00002AA0			3703+	DC	A(T63)	address of test
000039D8	00002B08			3704+	DC	A(T64)	address of test
000039DC	00002B70			3705+	DC	A(T65)	address of test
000039E0	00002BD8			3706+	DC	A(T66)	address of test
000039E4	00002C40			3707+	DC	A(T67)	address of test
000039E8	00002CA8			3708+	DC	A(T68)	address of test
000039EC	00002D10			3709+	DC	A(T69)	address of test
000039F0	00002D78			3710+	DC	A(T70)	address of test
000039F4	00002DE0			3711+	DC	A(T71)	address of test
000039F8	00002E48			3712+	DC	A(T72)	address of test
000039FC	00002EB0			3713+	DC	A(T73)	address of test
00003A00	00002F18			3714+	DC	A(T74)	address of test
00003A04	00002F80			3715+	DC	A(T75)	address of test
00003A08	00002FE8			3716+	DC	A(T76)	address of test
00003A0C	00003050			3717+	DC	A(T77)	address of test
00003A10	000030B8			3718+	DC	A(T78)	address of test
00003A14	00003120			3719+	DC	A(T79)	address of test
00003A18	00003188			3720+	DC	A(T80)	address of test
00003A1C	000031F0			3721+	DC	A(T81)	address of test
00003A20	00003258			3722+	DC	A(T82)	address of test
00003A24	000032C0			3723+	DC	A(T83)	address of test
00003A28	00003328			3724+	DC	A(T84)	address of test
00003A2C	00003390			3725+	DC	A(T85)	address of test
00003A30	000033F8			3726+	DC	A(T86)	address of test
00003A34	00003460			3727+	DC	A(T87)	address of test
00003A38	000034C8			3728+	DC	A(T88)	address of test
00003A3C	00003530			3729+	DC	A(T89)	address of test
00003A40	00003598			3730+	DC	A(T90)	address of test
00003A44	00003600			3731+	DC	A(T91)	address of test
00003A48	00003668			3732+	DC	A(T92)	address of test

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  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

00003A4C  000036D0                             3733+       DC     A(T93)          address of test
00003A50  00003738                             3734+       DC     A(T94)          address of test
00003A54  000037A0                             3735+       DC     A(T95)          address of test
00003A58  00003808                             3736+       DC     A(T96)          address of test
00003A5C  00003870                             3737+       DC     A(T97)          address of test
                                               3738+*
00003A60  00000000                             3739+       DC     A(0)                END OF TABLE
00003A64  00000000                             3740+       DC     A(0)
                                               3741
00003A68  00000000                             3742        DC     F'0'      END OF TABLE
00003A6C  00000000                             3743        DC     F'0'
```

```
 LOC        OBJECT CODE      ADDR1      ADDR2      STMT

                                                  3745 ********************************************************************
                                                  3746 *         Register equates
                                                  3747 ********************************************************************

                             00000000   00000001   3749 R0       EQU   0
                             00000001   00000001   3750 R1       EQU   1
                             00000002   00000001   3751 R2       EQU   2
                             00000003   00000001   3752 R3       EQU   3
                             00000004   00000001   3753 R4       EQU   4
                             00000005   00000001   3754 R5       EQU   5
                             00000006   00000001   3755 R6       EQU   6
                             00000007   00000001   3756 R7       EQU   7
                             00000008   00000001   3757 R8       EQU   8
                             00000009   00000001   3758 R9       EQU   9
                             0000000A   00000001   3759 R10      EQU   10
                             0000000B   00000001   3760 R11      EQU   11
                             0000000C   00000001   3761 R12      EQU   12
                             0000000D   00000001   3762 R13      EQU   13
                             0000000E   00000001   3763 R14      EQU   14
                             0000000F   00000001   3764 R15      EQU   15


                                                  3766 ********************************************************************
                                                  3767 *         Register equates
                                                  3768 ********************************************************************

                             00000000   00000001   3770 V0       EQU   0
                             00000001   00000001   3771 V1       EQU   1
                             00000002   00000001   3772 V2       EQU   2
                             00000003   00000001   3773 V3       EQU   3
                             00000004   00000001   3774 V4       EQU   4
                             00000005   00000001   3775 V5       EQU   5
                             00000006   00000001   3776 V6       EQU   6
                             00000007   00000001   3777 V7       EQU   7
                             00000008   00000001   3778 V8       EQU   8
                             00000009   00000001   3779 V9       EQU   9
                             0000000A   00000001   3780 V10      EQU   10
                             0000000B   00000001   3781 V11      EQU   11
                             0000000C   00000001   3782 V12      EQU   12
                             0000000D   00000001   3783 V13      EQU   13
                             0000000E   00000001   3784 V14      EQU   14
                             0000000F   00000001   3785 V15      EQU   15
                             00000010   00000001   3786 V16      EQU   16
                             00000011   00000001   3787 V17      EQU   17
                             00000012   00000001   3788 V18      EQU   18
                             00000013   00000001   3789 V19      EQU   19
                             00000014   00000001   3790 V20      EQU   20
                             00000015   00000001   3791 V21      EQU   21
```

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 LOC         OBJECT CODE       ADDR1       ADDR2     STMT

                            00000016   00000001   3792 V22      EQU   22
                            00000017   00000001   3793 V23      EQU   23
                            00000018   00000001   3794 V24      EQU   24
                            00000019   00000001   3795 V25      EQU   25
                            0000001A   00000001   3796 V26      EQU   26
                            0000001B   00000001   3797 V27      EQU   27
                            0000001C   00000001   3798 V28      EQU   28
                            0000001D   00000001   3799 V29      EQU   29
                            0000001E   00000001   3800 V30      EQU   30
                            0000001F   00000001   3801 V31      EQU   31
                                                  3802
                                                  3803          END
```

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
BEGIN	I	00000200	2	153	118	149	150	151									
CC	U	0000000A	1	531	264												
CCFOUND	X	000010FC	1	505	251	271											
CCMASK	U	0000000B	1	532	223												
CCMSG	U	00000328	1	240	235												
CCPRTEXP	C	000010A4	1	485	268												
CCPRTGOT	C	000010B4	1	488	275												
CCPRTLINE	C	00001061	16	480	490	278											
CCPRTLNG	U	00000055	1	490	277												
CCPRTNAME	C	0000108E	8	483	261												
CCPRTNUM	C	00001071	3	481	259												
CCPSW	F	000010F4	4	504	248	708	737	766	795	824	853	882	911	940	969	998	1033
					1062	1091	1120	1149	1178	1257	1286	1316	1345	1375	1404	1433	1462
					1492	1521	1550	1579	1609	1638	1668	1697	1727	1757	1787	1816	1846
					1875	1904	1933	1967	1996	2025	2054	2084	2113	2143	2172	2206	2236
					2266	2295	2325	2354	2384	2413	2448	2477	2506	2535	2566	2595	2624
					2653	2684	2713	2742	2771	2802	2831	2860	2889	2924	2953	2982	3011
					3040	3069	3098	3127	3158	3187	3218	3247	3278	3307	3337	3366	3399
					3430	3462	3494	3528	3559	3591	3623						
CTLR0	F	0000057C	4	421	163	164	165	166									
DECNUM	C	000010E2	16	500	256	258	265	267	272	274	290	292	299	301	306	308	313
					315												
E6TEST	4	00000000	32	524	214												
E6TESTS	F	000038DC	4	3638	205												
EDIT	X	000010B6	18	495	257	266	273	291	300	307	314						
ENDTEST	U	0000044E	1	335	210												
EOJ	I	00000560	4	411	198	338											
EOJPSW	D	00000550	8	409	411												
FAILCONT	U	0000043E	1	325	281												
FAILED	F	00001000	4	450	327	336											
FAILMSG	U	000003B8	1	288	230												
FAILPSW	D	00000568	8	413	415												
FAILTEST	I	00000578	4	415	339												
FB0001	F	00000288	8	182	186	187	189										
I3	U	00000007	1	528	298												
I4	U	00000008	1	529	305												
IMAGE	1	00000000	14960	0													
K	U	00000400	1	434	435	436	437										
K64	U	00010000	1	436													
M5	U	00000009	1	530	242	312											
MB	U	00100000	1	437													
MSG	I	00000498	4	371	197	354											
MSGCMD	C	000004E6	9	401	384	385											
MSGMSG	C	000004EF	95	402	378	399	376										
MSGMVC	I	000004E0	6	399	382												
MSGOK	I	000004AE	2	380	377												
MSGRET	I	000004CE	4	395	388	391											
MSGSAVE	F	000004D4	4	398	374	395											
NEXTE6	U	000002DC	1	207	233	330											
OPNAME	C	00000010	8	536	261	295											
PAGE	U	00001000	1	435													
PRT3	C	000010CC	18	498	257	258	259	266	267	268	273	274	275	291	292	293	300
					301	302	307	308	309	314	315	316					
PRTI3	C	00001044	3	464	302												
PRTI4	C	00001051	3	467	309												
PRTLINE	C	00001008	16	459	472	319											

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
PRTLNG	U	00000059	1	472	318												
PRTM5	C	0000105E	2	470	316												
PRTNAME	C	00001033	8	462	295												
PRTNUM	C	00001018	3	460	293												
R0	U	00000000	1	3749	112	163	166	186	188	189	190	195	212	216	217	277	318
					326	327	353	355	371	374	376	378	380	395	707	736	765
					794	823	852	881	910	939	968	997	1032	1061	1090	1119	1148
					1177	1256	1285	1315	1344	1374	1403	1432	1461	1491	1520	1549	1578
					1608	1637	1667	1696	1726	1756	1786	1815	1845	1874	1903	1932	1966
					1995	2024	2053	2083	2112	2142	2171	2205	2235	2265	2294	2324	2353
					2383	2412	2447	2476	2505	2534	2565	2594	2623	2652	2683	2712	2741
					2770	2801	2830	2859	2888	2923	2952	2981	3010	3039	3068	3097	3126
					3157	3186	3217	3246	3277	3306	3336	3365	3398	3429	3461	3493	3527
					3558	3590	3622										
R1	U	00000001	1	3750	196	223	224	225	228	229	241	242	243	248	249	250	251
					278	319	336	337	385	399							
R10	U	0000000A	1	3759	151	160	161										
R11	U	0000000B	1	3760	220	221	709	738	767	796	825	854	883	912	941	970	999
					1034	1063	1092	1121	1150	1179	1258	1287	1317	1346	1376	1405	1434
					1463	1493	1522	1551	1580	1610	1639	1669	1698	1728	1758	1788	1817
					1847	1876	1905	1934	1968	1997	2026	2055	2085	2114	2144	2173	2207
					2237	2267	2296	2326	2355	2385	2414	2449	2478	2507	2536	2567	2596
					2625	2654	2685	2714	2743	2772	2803	2832	2861	2890	2925	2954	2983
					3012	3041	3070	3099	3128	3159	3188	3219	3248	3279	3308	3338	3367
					3400	3431	3463	3495	3529	3560	3592	3624					
R12	U	0000000C	1	3761	205	208	232	329									
R13	U	0000000D	1	3762													
R14	U	0000000E	1	3763													
R15	U	0000000F	1	3764	279	320	348	358	359								
R2	U	00000002	1	3751	197	255	256	263	264	265	270	271	272	289	290	297	298
					299	304	305	306	311	312	313	353	354	355	372	374	380
					381	382	384	390	395	396	703	704	707	708	732	733	736
					737	761	762	765	766	790	791	794	795	819	820	823	824
					848	849	852	853	877	878	881	882	906	907	910	911	935
					936	939	940	964	965	968	969	993	994	997	998	1028	1029
					1032	1033	1057	1058	1061	1062	1086	1087	1090	1091	1115	1116	1119
					1120	1144	1145	1148	1149	1173	1174	1177	1178	1252	1253	1256	1257
					1281	1282	1285	1286	1311	1312	1315	1316	1340	1341	1344	1345	1370
					1371	1374	1375	1399	1400	1403	1404	1428	1429	1432	1433	1457	1458
					1461	1462	1487	1488	1491	1492	1516	1517	1520	1521	1545	1546	1549
					1550	1574	1575	1578	1579	1604	1605	1608	1609	1633	1634	1637	1638
					1663	1664	1667	1668	1692	1693	1696	1697	1722	1723	1726	1727	1752
					1753	1756	1757	1782	1783	1786	1787	1811	1812	1815	1816	1841	1842
					1845	1846	1870	1871	1874	1875	1899	1900	1903	1904	1928	1929	1932
					1933	1962	1963	1966	1967	1991	1992	1995	1996	2020	2021	2024	2025
					2049	2050	2053	2054	2079	2080	2083	2084	2108	2109	2112	2113	2138
					2139	2142	2143	2167	2168	2171	2172	2201	2202	2205	2206	2231	2232
					2235	2236	2261	2262	2265	2266	2290	2291	2294	2295	2320	2321	2324
					2325	2349	2350	2353	2354	2379	2380	2383	2384	2408	2409	2412	2413
					2443	2444	2447	2448	2472	2473	2476	2477	2501	2502	2505	2506	2530
					2531	2534	2535	2561	2562	2565	2566	2590	2591	2594	2595	2619	2620
					2623	2624	2648	2649	2652	2653	2679	2680	2683	2684	2708	2709	2712
					2713	2737	2738	2741	2742	2766	2767	2770	2771	2797	2798	2801	2802
					2826	2827	2830	2831	2855	2856	2859	2860	2884	2885	2888	2889	2919
					2920	2923	2924	2948	2949	2952	2953	2977	2978	2981	2982	3006	3007
					3010	3011	3035	3036	3039	3040	3064	3065	3068	3069	3093	3094	3097

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
					3098	3122	3123	3126	3127	3153	3154	3157	3158	3182	3183	3186	3187
					3213	3214	3217	3218	3242	3243	3246	3247	3273	3274	3277	3278	3302
					3303	3306	3307	3332	3333	3336	3337	3361	3362	3365	3366	3394	3395
					3398	3399	3425	3426	3429	3430	3457	3458	3461	3462	3489	3490	3493
					3494	3523	3524	3527	3528	3554	3555	3558	3559	3586	3587	3590	3591
					3618	3619	3622	3623									
R3	U	00000003	1	3752													
R4	U	00000004	1	3753													
R5	U	00000005	1	3754	208	209	214	349	357	688	711	717	740	746	769	775	798
					804	827	833	856	862	885	891	914	920	943	949	972	978
					1001	1013	1036	1042	1065	1071	1094	1100	1123	1129	1152	1158	1181
					1237	1260	1266	1289	1296	1319	1325	1348	1355	1378	1384	1407	1413
					1436	1442	1465	1472	1495	1501	1524	1530	1553	1559	1582	1589	1612
					1618	1641	1648	1671	1677	1700	1707	1730	1737	1760	1767	1790	1796
					1819	1826	1849	1855	1878	1884	1907	1913	1936	1947	1970	1976	1999
					2005	2028	2034	2057	2064	2087	2093	2116	2123	2146	2152	2175	2186
					2209	2216	2239	2246	2269	2275	2298	2305	2328	2334	2357	2364	2387
					2393	2416	2428	2451	2457	2480	2486	2509	2515	2538	2546	2569	2575
					2598	2604	2627	2633	2656	2664	2687	2693	2716	2722	2745	2751	2774
					2782	2805	2811	2834	2840	2863	2869	2892	2904	2927	2933	2956	2962
					2985	2991	3014	3020	3043	3049	3072	3078	3101	3107	3130	3138	3161
					3167	3190	3198	3221	3227	3250	3258	3281	3287	3310	3317	3340	3346
					3369	3379	3402	3410	3433	3442	3465	3474	3497	3508	3531	3539	3562
					3571	3594	3603	3626									
R6	U	00000006	1	3755													
R7	U	00000007	1	3756													
R8	U	00000008	1	3757	149	153	154	155	157								
R9	U	00000009	1	3758	150	157	158	160									
RE1	F	000011B4	4	710	697	700											
RE10	F	0000155C	4	971	958	961											
RE11	F	000015C4	4	1000	987	990											
RE12	F	0000162C	4	1035	1022	1025											
RE13	F	00001694	4	1064	1051	1054											
RE14	F	000016FC	4	1093	1080	1083											
RE15	F	00001764	4	1122	1109	1112											
RE16	F	000017CC	4	1151	1138	1141											
RE17	F	00001834	4	1180	1167	1170											
RE18	F	0000189C	4	1259	1246	1249											
RE19	F	00001904	4	1288	1275	1278											
RE2	F	0000121C	4	739	726	729											
RE20	F	0000196C	4	1318	1305	1308											
RE21	F	000019D4	4	1347	1334	1337											
RE22	F	00001A3C	4	1377	1364	1367											
RE23	F	00001AA4	4	1406	1393	1396											
RE24	F	00001B0C	4	1435	1422	1425											
RE25	F	00001B74	4	1464	1451	1454											
RE26	F	00001BDC	4	1494	1481	1484											
RE27	F	00001C44	4	1523	1510	1513											
RE28	F	00001CAC	4	1552	1539	1542											
RE29	F	00001D14	4	1581	1568	1571											
RE3	F	00001284	4	768	755	758											
RE30	F	00001D7C	4	1611	1598	1601											
RE31	F	00001DE4	4	1640	1627	1630											
RE32	F	00001E4C	4	1670	1657	1660											
RE33	F	00001EB4	4	1699	1686	1689											
RE34	F	00001F1C	4	1729	1716	1719											

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
RE35	F	00001F84	4	1759	1746	1749
RE36	F	00001FEC	4	1789	1776	1779
RE37	F	00002054	4	1818	1805	1808
RE38	F	000020BC	4	1848	1835	1838
RE39	F	00002124	4	1877	1864	1867
RE4	F	000012EC	4	797	784	787
RE40	F	0000218C	4	1906	1893	1896
RE41	F	000021F4	4	1935	1922	1925
RE42	F	0000225C	4	1969	1956	1959
RE43	F	000022C4	4	1998	1985	1988
RE44	F	0000232C	4	2027	2014	2017
RE45	F	00002394	4	2056	2043	2046
RE46	F	000023FC	4	2086	2073	2076
RE47	F	00002464	4	2115	2102	2105
RE48	F	000024CC	4	2145	2132	2135
RE49	F	00002534	4	2174	2161	2164
RE5	F	00001354	4	826	813	816
RE50	F	0000259C	4	2208	2195	2198
RE51	F	00002604	4	2238	2225	2228
RE52	F	0000266C	4	2268	2255	2258
RE53	F	000026D4	4	2297	2284	2287
RE54	F	0000273C	4	2327	2314	2317
RE55	F	000027A4	4	2356	2343	2346
RE56	F	0000280C	4	2386	2373	2376
RE57	F	00002874	4	2415	2402	2405
RE58	F	000028DC	4	2450	2437	2440
RE59	F	00002944	4	2479	2466	2469
RE6	F	000013BC	4	855	842	845
RE60	F	000029AC	4	2508	2495	2498
RE61	F	00002A14	4	2537	2524	2527
RE62	F	00002A7C	4	2568	2555	2558
RE63	F	00002AE4	4	2597	2584	2587
RE64	F	00002B4C	4	2626	2613	2616
RE65	F	00002BB4	4	2655	2642	2645
RE66	F	00002C1C	4	2686	2673	2676
RE67	F	00002C84	4	2715	2702	2705
RE68	F	00002CEC	4	2744	2731	2734
RE69	F	00002D54	4	2773	2760	2763
RE7	F	00001424	4	884	871	874
RE70	F	00002DBC	4	2804	2791	2794
RE71	F	00002E24	4	2833	2820	2823
RE72	F	00002E8C	4	2862	2849	2852
RE73	F	00002EF4	4	2891	2878	2881
RE74	F	00002F5C	4	2926	2913	2916
RE75	F	00002FC4	4	2955	2942	2945
RE76	F	0000302C	4	2984	2971	2974
RE77	F	00003094	4	3013	3000	3003
RE78	F	000030FC	4	3042	3029	3032
RE79	F	00003164	4	3071	3058	3061
RE8	F	0000148C	4	913	900	903
RE80	F	000031CC	4	3100	3087	3090
RE81	F	00003234	4	3129	3116	3119
RE82	F	0000329C	4	3160	3147	3150
RE83	F	00003304	4	3189	3176	3179
RE84	F	0000336C	4	3220	3207	3210
RE85	F	000033D4	4	3249	3236	3239

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
RE86	F	0000343C	4	3280	3267	3270
RE87	F	000034A4	4	3309	3296	3299
RE88	F	0000350C	4	3339	3326	3329
RE89	F	00003574	4	3368	3355	3358
RE9	F	000014F4	4	942	929	932
RE90	F	000035DC	4	3401	3388	3391
RE91	F	00003644	4	3432	3419	3422
RE92	F	000036AC	4	3464	3451	3454
RE93	F	00003714	4	3496	3483	3486
RE94	F	0000377C	4	3530	3517	3520
RE95	F	000037E4	4	3561	3548	3551
RE96	F	0000384C	4	3593	3580	3583
RE97	F	000038B4	4	3625	3612	3615
REA1	A	0000118C	4	700		
REA10	A	00001534	4	961		
REA11	A	0000159C	4	990		
REA12	A	00001604	4	1025		
REA13	A	0000166C	4	1054		
REA14	A	000016D4	4	1083		
REA15	A	0000173C	4	1112		
REA16	A	000017A4	4	1141		
REA17	A	0000180C	4	1170		
REA18	A	00001874	4	1249		
REA19	A	000018DC	4	1278		
REA2	A	000011F4	4	729		
REA20	A	00001944	4	1308		
REA21	A	000019AC	4	1337		
REA22	A	00001A14	4	1367		
REA23	A	00001A7C	4	1396		
REA24	A	00001AE4	4	1425		
REA25	A	00001B4C	4	1454		
REA26	A	00001BB4	4	1484		
REA27	A	00001C1C	4	1513		
REA28	A	00001C84	4	1542		
REA29	A	00001CEC	4	1571		
REA3	A	0000125C	4	758		
REA30	A	00001D54	4	1601		
REA31	A	00001DBC	4	1630		
REA32	A	00001E24	4	1660		
REA33	A	00001E8C	4	1689		
REA34	A	00001EF4	4	1719		
REA35	A	00001F5C	4	1749		
REA36	A	00001FC4	4	1779		
REA37	A	0000202C	4	1808		
REA38	A	00002094	4	1838		
REA39	A	000020FC	4	1867		
REA4	A	000012C4	4	787		
REA40	A	00002164	4	1896		
REA41	A	000021CC	4	1925		
REA42	A	00002234	4	1959		
REA43	A	0000229C	4	1988		
REA44	A	00002304	4	2017		
REA45	A	0000236C	4	2046		
REA46	A	000023D4	4	2076		
REA47	A	0000243C	4	2105		
REA48	A	000024A4	4	2135		

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
REA49	A	0000250C	4	2164	
REA5	A	0000132C	4	816	
REA50	A	00002574	4	2198	
REA51	A	000025DC	4	2228	
REA52	A	00002644	4	2258	
REA53	A	000026AC	4	2287	
REA54	A	00002714	4	2317	
REA55	A	0000277C	4	2346	
REA56	A	000027E4	4	2376	
REA57	A	0000284C	4	2405	
REA58	A	000028B4	4	2440	
REA59	A	0000291C	4	2469	
REA6	A	00001394	4	845	
REA60	A	00002984	4	2498	
REA61	A	000029EC	4	2527	
REA62	A	00002A54	4	2558	
REA63	A	00002ABC	4	2587	
REA64	A	00002B24	4	2616	
REA65	A	00002B8C	4	2645	
REA66	A	00002BF4	4	2676	
REA67	A	00002C5C	4	2705	
REA68	A	00002CC4	4	2734	
REA69	A	00002D2C	4	2763	
REA7	A	000013FC	4	874	
REA70	A	00002D94	4	2794	
REA71	A	00002DFC	4	2823	
REA72	A	00002E64	4	2852	
REA73	A	00002ECC	4	2881	
REA74	A	00002F34	4	2916	
REA75	A	00002F9C	4	2945	
REA76	A	00003004	4	2974	
REA77	A	0000306C	4	3003	
REA78	A	000030D4	4	3032	
REA79	A	0000313C	4	3061	
REA8	A	00001464	4	903	
REA80	A	000031A4	4	3090	
REA81	A	0000320C	4	3119	
REA82	A	00003274	4	3150	
REA83	A	000032DC	4	3179	
REA84	A	00003344	4	3210	
REA85	A	000033AC	4	3239	
REA86	A	00003414	4	3270	
REA87	A	0000347C	4	3299	
REA88	A	000034E4	4	3329	
REA89	A	0000354C	4	3358	
REA9	A	000014CC	4	932	
REA90	A	000035B4	4	3391	
REA91	A	0000361C	4	3422	
REA92	A	00003684	4	3454	
REA93	A	000036EC	4	3486	
REA94	A	00003754	4	3520	
REA95	A	000037BC	4	3551	
REA96	A	00003824	4	3583	
REA97	A	0000388C	4	3615	
READDR	A	0000001C	4	539	228
REG2LOW	U	000000DD	1	440	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES		
REG2PATT	U	AABBCCDD	1	439			
RELEN	A	00000018	4	538			
RPTDWSAV	D	00000488	8	364	353	355	
RPTERROR	I	0000045C	4	348	279	320	
RPTSAVE	F	0000047C	4	361	348	358	
RPTSVR5	F	00000480	4	362	349	357	
SKL0001	U	00000054	1	179	195		
SKT0001	C	0000022A	26	176	179	196	
SVOLDPSW	U	00000140	0	114			
T1	A	00001170	4	689	3641		
T10	A	00001518	4	950	3650		
T11	A	00001580	4	979	3651		
T12	A	000015E8	4	1014	3652		
T13	A	00001650	4	1043	3653		
T14	A	000016B8	4	1072	3654		
T15	A	00001720	4	1101	3655		
T16	A	00001788	4	1130	3656		
T17	A	000017F0	4	1159	3657		
T18	A	00001858	4	1238	3658		
T19	A	000018C0	4	1267	3659		
T2	A	000011D8	4	718	3642		
T20	A	00001928	4	1297	3660		
T21	A	00001990	4	1326	3661		
T22	A	000019F8	4	1356	3662		
T23	A	00001A60	4	1385	3663		
T24	A	00001AC8	4	1414	3664		
T25	A	00001B30	4	1443	3665		
T26	A	00001B98	4	1473	3666		
T27	A	00001C00	4	1502	3667		
T28	A	00001C68	4	1531	3668		
T29	A	00001CD0	4	1560	3669		
T3	A	00001240	4	747	3643		
T30	A	00001D38	4	1590	3670		
T31	A	00001DA0	4	1619	3671		
T32	A	00001E08	4	1649	3672		
T33	A	00001E70	4	1678	3673		
T34	A	00001ED8	4	1708	3674		
T35	A	00001F40	4	1738	3675		
T36	A	00001FA8	4	1768	3676		
T37	A	00002010	4	1797	3677		
T38	A	00002078	4	1827	3678		
T39	A	000020E0	4	1856	3679		
T4	A	000012A8	4	776	3644		
T40	A	00002148	4	1885	3680		
T41	A	000021B0	4	1914	3681		
T42	A	00002218	4	1948	3682		
T43	A	00002280	4	1977	3683		
T44	A	000022E8	4	2006	3684		
T45	A	00002350	4	2035	3685		
T46	A	000023B8	4	2065	3686		
T47	A	00002420	4	2094	3687		
T48	A	00002488	4	2124	3688		
T49	A	000024F0	4	2153	3689		
T5	A	00001310	4	805	3645		
T50	A	00002558	4	2187	3690		
T51	A	000025C0	4	2217	3691		

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES		
T52	A	00002628	4	2247	3692		
T53	A	00002690	4	2276	3693		
T54	A	000026F8	4	2306	3694		
T55	A	00002760	4	2335	3695		
T56	A	000027C8	4	2365	3696		
T57	A	00002830	4	2394	3697		
T58	A	00002898	4	2429	3698		
T59	A	00002900	4	2458	3699		
T6	A	00001378	4	834	3646		
T60	A	00002968	4	2487	3700		
T61	A	000029D0	4	2516	3701		
T62	A	00002A38	4	2547	3702		
T63	A	00002AA0	4	2576	3703		
T64	A	00002B08	4	2605	3704		
T65	A	00002B70	4	2634	3705		
T66	A	00002BD8	4	2665	3706		
T67	A	00002C40	4	2694	3707		
T68	A	00002CA8	4	2723	3708		
T69	A	00002D10	4	2752	3709		
T7	A	000013E0	4	863	3647		
T70	A	00002D78	4	2783	3710		
T71	A	00002DE0	4	2812	3711		
T72	A	00002E48	4	2841	3712		
T73	A	00002EB0	4	2870	3713		
T74	A	00002F18	4	2905	3714		
T75	A	00002F80	4	2934	3715		
T76	A	00002FE8	4	2963	3716		
T77	A	00003050	4	2992	3717		
T78	A	000030B8	4	3021	3718		
T79	A	00003120	4	3050	3719		
T8	A	00001448	4	892	3648		
T80	A	00003188	4	3079	3720		
T81	A	000031F0	4	3108	3721		
T82	A	00003258	4	3139	3722		
T83	A	000032C0	4	3168	3723		
T84	A	00003328	4	3199	3724		
T85	A	00003390	4	3228	3725		
T86	A	000033F8	4	3259	3726		
T87	A	00003460	4	3288	3727		
T88	A	000034C8	4	3318	3728		
T89	A	00003530	4	3347	3729		
T9	A	000014B0	4	921	3649		
T90	A	00003598	4	3380	3730		
T91	A	00003600	4	3411	3731		
T92	A	00003668	4	3443	3732		
T93	A	000036D0	4	3475	3733		
T94	A	00003738	4	3509	3734		
T95	A	000037A0	4	3540	3735		
T96	A	00003808	4	3572	3736		
T97	A	00003870	4	3604	3737		
TESTCC	I	00000324	4	235	225		
TESTING	F	00001004	4	451	217		
TESTREST	U	0000030C	1	227	244		
TNUM	H	00000004	2	526	216	255	289
TSUB	A	00000000	4	525	220		
TTABLE	F	000038DC	4	3640			

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
V0	U	00000000	1	3770													
V1	U	00000001	1	3771	219	705	706	734	735	763	764	792	793	821	822	850	851
					879	880	908	909	937	938	966	967	995	996	1030	1031	1059
					1060	1088	1089	1117	1118	1146	1147	1175	1176	1254	1255	1283	1284
					1313	1314	1342	1343	1372	1373	1401	1402	1430	1431	1459	1460	1489
					1490	1518	1519	1547	1548	1576	1577	1606	1607	1635	1636	1665	1666
					1694	1695	1724	1725	1754	1755	1784	1785	1813	1814	1843	1844	1872
					1873	1901	1902	1930	1931	1964	1965	1993	1994	2022	2023	2051	2052
					2081	2082	2110	2111	2140	2141	2169	2170	2203	2204	2233	2234	2263
					2264	2292	2293	2322	2323	2351	2352	2381	2382	2410	2411	2445	2446
					2474	2475	2503	2504	2532	2533	2563	2564	2592	2593	2621	2622	2650
					2651	2681	2682	2710	2711	2739	2740	2768	2769	2799	2800	2828	2829
					2857	2858	2886	2887	2921	2922	2950	2951	2979	2980	3008	3009	3037
					3038	3066	3067	3095	3096	3124	3125	3155	3156	3184	3185	3215	3216
					3244	3245	3275	3276	3304	3305	3334	3335	3363	3364	3396	3397	3427
					3428	3459	3460	3491	3492	3525	3526	3556	3557	3588	3589	3620	3621
V10	U	0000000A	1	3780													
V11	U	0000000B	1	3781													
V12	U	0000000C	1	3782													
V13	U	0000000D	1	3783													
V14	U	0000000E	1	3784													
V15	U	0000000F	1	3785													
V16	U	00000010	1	3786													
V17	U	00000011	1	3787													
V18	U	00000012	1	3788													
V19	U	00000013	1	3789													
V1FUDGE	X	00001130	16	514	219												
V1INPUT	C	00001140	16	515													
V1OUTPUT	X	00001110	16	512	229	706	735	764	793	822	851	880	909	938	967	996	1031
					1060	1089	1118	1147	1176	1255	1284	1314	1343	1373	1402	1431	1460
					1490	1519	1548	1577	1607	1636	1666	1695	1725	1755	1785	1814	1844
					1873	1902	1931	1965	1994	2023	2052	2082	2111	2141	2170	2204	2234
					2264	2293	2323	2352	2382	2411	2446	2475	2504	2533	2564	2593	2622
					2651	2682	2711	2740	2769	2800	2829	2858	2887	2922	2951	2980	3009
					3038	3067	3096	3125	3156	3185	3216	3245	3276	3305	3335	3364	3397
					3428	3460	3492	3526	3557	3589	3621						
V2	U	00000002	1	3772	704	705	733	734	762	763	791	792	820	821	849	850	878
					879	907	908	936	937	965	966	994	995	1029	1030	1058	1059
					1087	1088	1116	1117	1145	1146	1174	1175	1253	1254	1282	1283	1312
					1313	1341	1342	1371	1372	1400	1401	1429	1430	1458	1459	1488	1489
					1517	1518	1546	1547	1575	1576	1605	1606	1634	1635	1664	1665	1693
					1694	1723	1724	1753	1754	1783	1784	1812	1813	1842	1843	1871	1872
					1900	1901	1929	1930	1963	1964	1992	1993	2021	2022	2050	2051	2080
					2081	2109	2110	2139	2140	2168	2169	2202	2203	2232	2233	2262	2263
					2291	2292	2321	2322	2350	2351	2380	2381	2409	2410	2444	2445	2473
					2474	2502	2503	2531	2532	2562	2563	2591	2592	2620	2621	2649	2650
					2680	2681	2709	2710	2738	2739	2767	2768	2798	2799	2827	2828	2856
					2857	2885	2886	2920	2921	2949	2950	2978	2979	3007	3008	3036	3037
					3065	3066	3094	3095	3123	3124	3154	3155	3183	3184	3214	3215	3243
					3244	3274	3275	3303	3304	3333	3334	3362	3363	3395	3396	3426	3427
					3458	3459	3490	3491	3524	3525	3555	3556	3587	3588	3619	3620	
V20	U	00000014	1	3790													
V21	U	00000015	1	3791													
V22	U	00000016	1	3792													
V23	U	00000017	1	3793													
V24	U	00000018	1	3794													

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V25	U	00000019	1	3795	
V26	U	0000001A	1	3796	
V27	U	0000001B	1	3797	
V28	U	0000001C	1	3798	
V29	U	0000001D	1	3799	
V2VALUE	A	0000000C	4	534	
V2_1	A	0000117C	4	697	703
V2_10	A	00001524	4	958	964
V2_11	A	0000158C	4	987	993
V2_12	A	000015F4	4	1022	1028
V2_13	A	0000165C	4	1051	1057
V2_14	A	000016C4	4	1080	1086
V2_15	A	0000172C	4	1109	1115
V2_16	A	00001794	4	1138	1144
V2_17	A	000017FC	4	1167	1173
V2_18	A	00001864	4	1246	1252
V2_19	A	000018CC	4	1275	1281
V2_2	A	000011E4	4	726	732
V2_20	A	00001934	4	1305	1311
V2_21	A	0000199C	4	1334	1340
V2_22	A	00001A04	4	1364	1370
V2_23	A	00001A6C	4	1393	1399
V2_24	A	00001AD4	4	1422	1428
V2_25	A	00001B3C	4	1451	1457
V2_26	A	00001BA4	4	1481	1487
V2_27	A	00001C0C	4	1510	1516
V2_28	A	00001C74	4	1539	1545
V2_29	A	00001CDC	4	1568	1574
V2_3	A	0000124C	4	755	761
V2_30	A	00001D44	4	1598	1604
V2_31	A	00001DAC	4	1627	1633
V2_32	A	00001E14	4	1657	1663
V2_33	A	00001E7C	4	1686	1692
V2_34	A	00001EE4	4	1716	1722
V2_35	A	00001F4C	4	1746	1752
V2_36	A	00001FB4	4	1776	1782
V2_37	A	0000201C	4	1805	1811
V2_38	A	00002084	4	1835	1841
V2_39	A	000020EC	4	1864	1870
V2_4	A	000012B4	4	784	790
V2_40	A	00002154	4	1893	1899
V2_41	A	000021BC	4	1922	1928
V2_42	A	00002224	4	1956	1962
V2_43	A	0000228C	4	1985	1991
V2_44	A	000022F4	4	2014	2020
V2_45	A	0000235C	4	2043	2049
V2_46	A	000023C4	4	2073	2079
V2_47	A	0000242C	4	2102	2108
V2_48	A	00002494	4	2132	2138
V2_49	A	000024FC	4	2161	2167
V2_5	A	0000131C	4	813	819
V2_50	A	00002564	4	2195	2201
V2_51	A	000025CC	4	2225	2231
V2_52	A	00002634	4	2255	2261
V2_53	A	0000269C	4	2284	2290
V2_54	A	00002704	4	2314	2320

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
V2_55	A	0000276C	4	2343	2349
V2_56	A	000027D4	4	2373	2379
V2_57	A	0000283C	4	2402	2408
V2_58	A	000028A4	4	2437	2443
V2_59	A	0000290C	4	2466	2472
V2_6	A	00001384	4	842	848
V2_60	A	00002974	4	2495	2501
V2_61	A	000029DC	4	2524	2530
V2_62	A	00002A44	4	2555	2561
V2_63	A	00002AAC	4	2584	2590
V2_64	A	00002B14	4	2613	2619
V2_65	A	00002B7C	4	2642	2648
V2_66	A	00002BE4	4	2673	2679
V2_67	A	00002C4C	4	2702	2708
V2_68	A	00002CB4	4	2731	2737
V2_69	A	00002D1C	4	2760	2766
V2_7	A	000013EC	4	871	877
V2_70	A	00002D84	4	2791	2797
V2_71	A	00002DEC	4	2820	2826
V2_72	A	00002E54	4	2849	2855
V2_73	A	00002EBC	4	2878	2884
V2_74	A	00002F24	4	2913	2919
V2_75	A	00002F8C	4	2942	2948
V2_76	A	00002FF4	4	2971	2977
V2_77	A	0000305C	4	3000	3006
V2_78	A	000030C4	4	3029	3035
V2_79	A	0000312C	4	3058	3064
V2_8	A	00001454	4	900	906
V2_80	A	00003194	4	3087	3093
V2_81	A	000031FC	4	3116	3122
V2_82	A	00003264	4	3147	3153
V2_83	A	000032CC	4	3176	3182
V2_84	A	00003334	4	3207	3213
V2_85	A	0000339C	4	3236	3242
V2_86	A	00003404	4	3267	3273
V2_87	A	0000346C	4	3296	3302
V2_88	A	000034D4	4	3326	3332
V2_89	A	0000353C	4	3355	3361
V2_9	A	000014BC	4	929	935
V2_90	A	000035A4	4	3388	3394
V2_91	A	0000360C	4	3419	3425
V2_92	A	00003674	4	3451	3457
V2_93	A	000036DC	4	3483	3489
V2_94	A	00003744	4	3517	3523
V2_95	A	000037AC	4	3548	3554
V2_96	A	00003814	4	3580	3586
V2_97	A	0000387C	4	3612	3618
V3	U	00000003	1	3773	
V30	U	0000001E	1	3800	
V31	U	0000001F	1	3801	
V4	U	00000004	1	3774	
V5	U	00000005	1	3775	
V6	U	00000006	1	3776	
V7	U	00000007	1	3777	
V8	U	00000008	1	3778	
V9	U	00000009	1	3779	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES	
X0001	U	000002B0	1	185	173	186
X1	F	00001190	4	702	689	
X10	F	00001538	4	963	950	
X11	F	000015A0	4	992	979	
X12	F	00001608	4	1027	1014	
X13	F	00001670	4	1056	1043	
X14	F	000016D8	4	1085	1072	
X15	F	00001740	4	1114	1101	
X16	F	000017A8	4	1143	1130	
X17	F	00001810	4	1172	1159	
X18	F	00001878	4	1251	1238	
X19	F	000018E0	4	1280	1267	
X2	F	000011F8	4	731	718	
X20	F	00001948	4	1310	1297	
X21	F	000019B0	4	1339	1326	
X22	F	00001A18	4	1369	1356	
X23	F	00001A80	4	1398	1385	
X24	F	00001AE8	4	1427	1414	
X25	F	00001B50	4	1456	1443	
X26	F	00001BB8	4	1486	1473	
X27	F	00001C20	4	1515	1502	
X28	F	00001C88	4	1544	1531	
X29	F	00001CF0	4	1573	1560	
X3	F	00001260	4	760	747	
X30	F	00001D58	4	1603	1590	
X31	F	00001DC0	4	1632	1619	
X32	F	00001E28	4	1662	1649	
X33	F	00001E90	4	1691	1678	
X34	F	00001EF8	4	1721	1708	
X35	F	00001F60	4	1751	1738	
X36	F	00001FC8	4	1781	1768	
X37	F	00002030	4	1810	1797	
X38	F	00002098	4	1840	1827	
X39	F	00002100	4	1869	1856	
X4	F	000012C8	4	789	776	
X40	F	00002168	4	1898	1885	
X41	F	000021D0	4	1927	1914	
X42	F	00002238	4	1961	1948	
X43	F	000022A0	4	1990	1977	
X44	F	00002308	4	2019	2006	
X45	F	00002370	4	2048	2035	
X46	F	000023D8	4	2078	2065	
X47	F	00002440	4	2107	2094	
X48	F	000024A8	4	2137	2124	
X49	F	00002510	4	2166	2153	
X5	F	00001330	4	818	805	
X50	F	00002578	4	2200	2187	
X51	F	000025E0	4	2230	2217	
X52	F	00002648	4	2260	2247	
X53	F	000026B0	4	2289	2276	
X54	F	00002718	4	2319	2306	
X55	F	00002780	4	2348	2335	
X56	F	000027E8	4	2378	2365	
X57	F	00002850	4	2407	2394	
X58	F	000028B8	4	2442	2429	
X59	F	00002920	4	2471	2458	

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
X6	F	00001398	4	847	834
X60	F	00002988	4	2500	2487
X61	F	000029F0	4	2529	2516
X62	F	00002A58	4	2560	2547
X63	F	00002AC0	4	2589	2576
X64	F	00002B28	4	2618	2605
X65	F	00002B90	4	2647	2634
X66	F	00002BF8	4	2678	2665
X67	F	00002C60	4	2707	2694
X68	F	00002CC8	4	2736	2723
X69	F	00002D30	4	2765	2752
X7	F	00001400	4	876	863
X70	F	00002D98	4	2796	2783
X71	F	00002E00	4	2825	2812
X72	F	00002E68	4	2854	2841
X73	F	00002ED0	4	2883	2870
X74	F	00002F38	4	2918	2905
X75	F	00002FA0	4	2947	2934
X76	F	00003008	4	2976	2963
X77	F	00003070	4	3005	2992
X78	F	000030D8	4	3034	3021
X79	F	00003140	4	3063	3050
X8	F	00001468	4	905	892
X80	F	000031A8	4	3092	3079
X81	F	00003210	4	3121	3108
X82	F	00003278	4	3152	3139
X83	F	000032E0	4	3181	3168
X84	F	00003348	4	3212	3199
X85	F	000033B0	4	3241	3228
X86	F	00003418	4	3272	3259
X87	F	00003480	4	3301	3288
X88	F	000034E8	4	3331	3318
X89	F	00003550	4	3360	3347
X9	F	000014D0	4	934	921
X90	F	000035B8	4	3393	3380
X91	F	00003620	4	3424	3411
X92	F	00003688	4	3456	3443
X93	F	000036F0	4	3488	3475
X94	F	00003758	4	3522	3509
X95	F	000037C0	4	3553	3540
X96	F	00003828	4	3585	3572
X97	F	00003890	4	3617	3604
XC0001	U	000002D8	1	199	191
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=A(E6TESTS)	A	00000588	4	426	205
=AL2(L'MSGMSG)	R	00000596	2	430	376
=F'1'	F	0000058C	4	427	243	326
=F'2'	F	00000584	4	425	190
=H'0'	H	00000594	2	429	371
=XL4'3'	X	00000590	4	428	250

MACRO   DEFN   REFERENCES

FCHECK   63   172
PTTABLE   606   3639
VRI_G   551   686   715   744   773   802   831   860   889   918   947   976   1011   1040   1069   1098   1127   1156
                 1235   1264   1294   1323   1353   1382   1411   1440   1470   1499   1528   1557   1587   1616   1646   1675   1705
                 1735   1765   1794   1824   1853   1882   1911   1945   1974   2003   2032   2062   2091   2121   2150   2184   2214
                 2244   2273   2303   2332   2362   2391   2426   2455   2484   2513   2544   2573   2602   2631   2662   2691   2720
                 2749   2780   2809   2838   2867   2902   2931   2960   2989   3018   3047   3076   3105   3136   3165   3196   3225
                 3256   3285   3315   3344   3377   3408   3440   3472   3506   3537   3569   3601

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     DESC      SYMBOL   SIZE      POS         ADDR

Entry: 0

Image       IMAGE    14960   0000-3A6F   0000-3A6F
  Region             14960   0000-3A6F   0000-3A6F
    CSECT   ZVE6TST  14960   0000-3A6F   0000-3A6F
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STMT   FILE NAME

1   /home/tn529/sharedvfp/tests/zvector-e6-16-VSRP-VPSOP.asm

** NO ERRORS FOUND **