```
  LOC        OBJECT CODE     ADDR1     ADDR2    STMT

                                                 2 ********************************************************************
                                                 3 *
                                                 4 *         Zvector E6 instruction tests for VRR-h encoded:
                                                 5 *
                                                 6 *         E677 VCP     - VECTOR COMPARE DECIMAL
                                                 7 *
                                                 8 *         James Wekel June 2024
                                                 9 ********************************************************************
                                                10
                                                11 ********************************************************************
                                                12 *
                                                13 *         basic instruction tests
                                                14 *
                                                15 ********************************************************************
                                                16 *   This program tests proper functioning of the z/arch E6 VRR-h vector
                                                17 *   compare decimal. Exceptions are not tested.
                                                18 *
                                                19 *   PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch
                                                20 *   obvious coding errors.  None of the tests are thorough.  They are
                                                21 *   NOT designed to test all aspects of any of the instructions.
                                                22 *
                                                23 ********************************************************************
                                                24 *
                                                25 *    *Testcase zvector-e6-15-comparedecimal: VECTOR E6 VRR-h instruction
                                                26 *    *
                                                27 *    *   Zvector E6 tests for VRR-h encoded instruction:
                                                28 *    *
                                                29 *    *   E677 VCP     - VECTOR COMPARE DECIMAL
                                                30 *    *
                                                31 *    *   # ----------------------------------------------------------
                                                32 *    *   #  This tests only the basic function of the instruction.
                                                33 *    *   #  Exceptions are NOT tested.
                                                34 *    *   # ----------------------------------------------------------
                                                35 *    *
                                                36 *    mainsize    2
                                                37 *    numcpu      1
                                                38 *    sysclear
                                                39 *    archlvl     z/Arch
                                                40 *
                                                41 *    diag8cmd    enable   # (needed for messages to Hercules console)
                                                42 *    loadcore    "$(testpath)/zvector-e6-15-comparedecimal.core" 0x0
                                                43 *    diag8cmd    disable  # (reset back to default)
                                                44 *
                                                45 *    *Done
                                                46 *
                                                47 ********************************************************************

              00000000  000019FF              49 ZVE6TST  START 0
00000000      00000000                        50           USING ZVE6TST,R0          Low core addressability
                                                51
              00000140  00000000              52 SVOLDPSW EQU    ZVE6TST+X'140'       z/Arch Supervisor call old PSW

00000000      00000000  000001A0              54           ORG    ZVE6TST+X'1A0'      z/Architecure RESTART PSW
000001A0      00000001 80000000               55           DC     X'0000000180000000'
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000001A8	00000000 00000200			56	DC	AD(BEGIN)	
000001B0		000001B0	000001D0	58	ORG	ZVE6TST+X'1D0'	z/Architecure PROGRAM CHECK PSW
000001D0	00020001 80000000			59	DC	X'0002000180000000'	
000001D8	00000000 0000DEAD			60	DC	AD(X'DEAD')	
000001E0		000001E0	00000200	62	ORG	ZVE6TST+X'200'	Start of actual test program...
				63			

```
   LOC        OBJECT CODE      ADDR1     ADDR2      STMT

                                                    65  *************************************************************************
                                                    66  *              The actual "ZVE6TST" program itself...
                                                    67  *************************************************************************
                                                    68  *
                                                    69  *    Architecture Mode: z/Arch
                                                    70  *    Register Usage:
                                                    71  *
                                                    72  *     R0          (work)
                                                    73  *     R1-4        (work)
                                                    74  *     R5          Testing control table - current test base
                                                    75  *     R6-R7       (work)
                                                    76  *     R8          First base register
                                                    77  *     R9          Second base register
                                                    78  *     R10         Third base register
                                                    79  *     R11         E6TEST call return
                                                    80  *     R12         E6TESTS register
                                                    81  *     R13         (work)
                                                    82  *     R14         Subroutine call
                                                    83  *     R15         Secondary Subroutine call or work
                                                    84  *
                                                    85  *************************************************************************

00000200                        00000200            87           USING   BEGIN,R8          FIRST Base Register
00000200                        00001200            88           USING   BEGIN+4096,R9     SECOND Base Register

00000200  0580                                      90  BEGIN    BALR    R8,0              Initialize FIRST base register
00000202  0680                                      91           BCTR    R8,0              Initialize FIRST base register
00000204  0680                                      92           BCTR    R8,0              Initialize FIRST base register

00000206  4190 8800                      00000800   94           LA      R9,2048(,R8)      Initialize SECOND base register
0000020A  4190 9800                      00000800   95           LA      R9,2048(,R9)      Initialize SECOND base register

0000020E  41A0 9800                      00000800   97           LA      R10,2048(,R9)     Initialize THIRD base register
00000212  41A0 A800                      00000800   98           LA      R10,2048(,R10)    Initialize THIRD base register
                                                    99
00000216  B600 820C                      0000040C  100           STCTL   R0,R0,CTLR0       Store CR0 to enable AFP
0000021A  9604 820D                      0000040D  101           OI      CTLR0+1,X'04'     Turn on AFP bit
0000021E  9602 820D                      0000040D  102           OI      CTLR0+1,X'02'     Turn on Vector bit
00000222  B700 820C                      0000040C  103           LCTL    R0,R0,CTLR0       Reload updated CR0
```

```
  LOC         OBJECT CODE      ADDR1     ADDR2     STMT

                                                   105 *************************************************************************
                                                   106 *              Do tests in the E6TESTS table
                                                   107 *************************************************************************
                                                   108
00000226  58C0 8214                      00000414  109          L     R12,E6TADR          get table of test addresses
                                                   110
                      0000022A  00000001  111 NEXTE6   EQU   *
0000022A  5850 C000                      00000000  112          L     R5,0(0,R12)         get test address
0000022E  1255                                     113          LTR   R5,R5                 have a test?
00000230  4780 80E4                      000002E4  114          BZ    ENDTEST                 done?
                                                   115
00000234  B982 0000                                116          XGR   R0,R0               no cc error
                                                   117
00000238              00000000                     118          USING E6TEST,R5
                                                   119
00000238  58B0 5000                      00000000  120          L     R11,TSUB            get address of test routine
0000023C  05BB                                     121          BALR  R11,R11             do test
                                                   122
0000023E  E310 5009 0076                 00000009  123          LB    R1,CCMASK           (failure CC mask)
00000244  8910 0004                      00000004  124          SLL   R1,4                (shift to BC instr CC position)
00000248  4410 8054                      00000254  125          EX    R1,TESTCC             fail if...
                                                   126
0000024C  41C0 C004                      00000004  127          LA    R12,4(0,R12)        next test address
00000250  47F0 802A                      0000022A  128          B     NEXTE6
                                                   129
00000254  4700 8058                      00000258  130 TESTCC   BC    0,CCMSG             (fail if unexpected condition code)
                                                   131
```

```
  LOC          OBJECT CODE       ADDR1      ADDR2      STMT

                                                       133 *************************************************************************
                                                       134 * cc was not as expected
                                                       135 *************************************************************************
                              00000258   00000001      136 CCMSG     EQU    *
                                                       137 *
                                                       138 * extract CC extracted PSW
                                                       139 *
00000258   5810 8E98                      00001098      140           L      R1,CCPSW
0000025C   8810 000C                      0000000C      141           SRL    R1,12
00000260   5410 8218                      00000418      142           N      R1,=XL4'3'
00000264   4210 8EA0                      000010A0      143           STC    R1,CCFOUND       save cc
                                                       144 *
                                                       145 * FILL IN MESSAGE
                                                       146 *
00000268   4820 5004                      00000004      147           LH     R2,TNUM                       get test number and convert
0000026C   4E20 8E85                      00001085      148           CVD    R2,DECNUM
00000270   D211 8E6F 8E59      0000106F   00001059      149           MVC    PRT3,EDIT
00000276   DE11 8E6F 8E85      0000106F   00001085      150           ED     PRT3,DECNUM
0000027C   D202 8E14 8E7C      00001014   0000107C      151           MVC    CCPRTNUM(3),PRT3+13           fill in message with test #
                                                       152
00000282   D207 8E31 500A      00001031   0000000A      153           MVC    CCPRTNAME,OPNAME             fill in message with instruction
                                                       154
00000288   B982 0022                                    155           XGR    R2,R2                        get CC as U8
0000028C   4320 5008                      00000008      156           IC     R2,CC
00000290   4E20 8E85                      00001085      157           CVD    R2,DECNUM                    and convert
00000294   D211 8E6F 8E59      0000106F   00001059      158           MVC    PRT3,EDIT
0000029A   DE11 8E6F 8E85      0000106F   00001085      159           ED     PRT3,DECNUM
000002A0   D200 8E47 8E7E      00001047   0000107E      160           MVC    CCPRTEXP(1),PRT3+15          fill in message with CC field
                                                       161
000002A6   B982 0022                                    162           XGR    R2,R2                        get CCFOUND as U8
000002AA   4320 8EA0                      000010A0      163           IC     R2,CCFOUND
000002AE   4E20 8E85                      00001085      164           CVD    R2,DECNUM                    and convert
000002B2   D211 8E6F 8E59      0000106F   00001059      165           MVC    PRT3,EDIT
000002B8   DE11 8E6F 8E85      0000106F   00001085      166           ED     PRT3,DECNUM
000002BE   D200 8E57 8E7E      00001057   0000107E      167           MVC    CCPRTGOT(1),PRT3+15          fill in message with ccfound
                                                       168
000002C4   4100 0055                      00000055      169           LA     R0,CCPRTLNG                  message length
000002C8   4110 8E04                      00001004      170           LA     R1,CCPRTLINE                 messagfe address
000002CC   45F0 80F2                      000002F2      171           BAL    R15,RPTERROR
                                                       172
000002D0   47F0 80D4                      000002D4      173           B      FAILCONT
```

```
   LOC        OBJECT CODE     ADDR1     ADDR2    STMT

                                                 175 ****************************************************************************
                                                 176 * continue after a failed test
                                                 177 ****************************************************************************
                            000002D4  00000001   178 FAILCONT EQU    *
000002D4   5800 821C                   0000041C   179          L      R0,=F'1'            set GLOBAL failed test indicator
000002D8   5000 8E00                   00001000   180          ST     R0,FAILED
                                                 181
000002DC   41C0 C004                   00000004   182          LA     R12,4(0,R12)       next test address
000002E0   47F0 802A                   0000022A   183          B      NEXTE6


                                                 185 ****************************************************************************
                                                 186 * end of testing; set ending psw
                                                 187 ****************************************************************************
                            000002E4  00000001   188 ENDTEST  EQU    *
000002E4   5810 8E00                   00001000   189          L      R1,FAILED          did a test fail?
000002E8   1211                                   190          LTR    R1,R1
000002EA   4780 81F0                   000003F0   191          BZ     EOJ                   No, exit
000002EE   47F0 8208                   00000408   192          B      FAILTEST              Yes, exit with BAD PSW
                                                 193
```

```
 LOC        OBJECT CODE      ADDR1    ADDR2    STMT

                                               195 **********************************************************************
                                               196 *          RPTERROR           Report instruction test in error
                                               197 *                                R0 = MESSGAE LENGTH
                                               198 *                                R1 = ADDRESS OF MESSAGE
                                               199 **********************************************************************

000002F2  50F0 8110               00000310     201 RPTERROR ST    R15,RPTSAVE             Save return address
000002F6  5050 8114               00000314     202          ST    R5,RPTSVR5              Save R5
                                               203 *
                                               204 *          Use Hercules Diagnose for Message to console
                                               205 *
000002FA  9002 8118               00000318     206          STM   R0,R2,RPTDWSAV          save regs used by MSG
000002FE  4520 8128               00000328     207          BAL   R2,MSG                  call Hercules console MSG display
00000302  9802 8118               00000318     208          LM    R0,R2,RPTDWSAV          restore regs

00000306  5850 8114               00000314     210          L     R5,RPTSVR5              Restore R5
0000030A  58F0 8110               00000310     211          L     R15,RPTSAVE             Restore return address
0000030E  07FF                                 212          BR    R15                     Return to caller

00000310  00000000                             214 RPTSAVE  DC    F'0'                    R15 save area
00000314  00000000                             215 RPTSVR5  DC    F'0'                    R5 save area

00000318  00000000 00000000                    217 RPTDWSAV DC    2D'0'                   R0-R2 save area for MSG call
```

```
  LOC        OBJECT CODE     ADDR1     ADDR2    STMT

                                                219 *******************************************************************************
                                                220 *         Issue HERCULES MESSAGE pointed to by R1, length in R0
                                                221 *             R2 = return address
                                                222 *******************************************************************************
                                                223
00000328   4900 8220                  00000420  224 MSG      CH    R0,=H'0'              Do we even HAVE a message?
0000032C   07D2                                  225          BNHR  R2                    No, ignore
                                                226
0000032E   9002 8160                  00000360  227          STM   R0,R2,MSGSAVE         Save registers
                                                228
00000332   4900 8222                  00000422  229          CH    R0,=AL2(L'MSGMSG)     Message length within limits?
00000336   47D0 813E                  0000033E  230          BNH   MSGOK                 Yes, continue
0000033A   4100 005F                  0000005F  231          LA    R0,L'MSGMSG           No, set to maximum
                                                232
0000033E   1820                                 233 MSGOK    LR    R2,R0                 Copy length to work register
00000340   0620                                 234          BCTR  R2,0                  Minus-1 for execute
00000342   4420 816C                  0000036C  235          EX    R2,MSGMVC             Copy message to O/P buffer
                                                236
00000346   4120 200A                  0000000A  237          LA    R2,1+L'MSGCMD(,R2)    Calculate true command length
0000034A   4110 8172                  00000372  238          LA    R1,MSGCMD             Point to true command
                                                239
0000034E   83120008                             240          DC    X'83',X'12',X'0008'   Issue Hercules Diagnose X'008'
00000352   4780 8158                  00000358  241          BZ    MSGRET                Return if successful
00000356   0000                                 242          DC    H'0'                  CRASH for debugging purposes
                                                243
00000358   9802 8160                  00000360  244 MSGRET   LM    R0,R2,MSGSAVE         Restore registers
0000035C   07F2                                 245          BR    R2                    Return to caller


00000360   00000000 00000000                    247 MSGSAVE  DC    3F'0'                 Registers save area
0000036C   D200 817B 1000   0000037B  00000000  248 MSGMVC   MVC   MSGMSG(0),0(R1)       Executed instruction

00000372   D4E2C7D5 D6C8405C                     250 MSGCMD   DC    C'MSGNOH * '          *** HERCULES MESSAGE COMMAND ***
0000037B   40404040 40404040                     251 MSGMSG   DC    CL95' '               The message text to be displayed
                                                252
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT				
				254	**			
				255	*		Normal completion or Abnormal termination PSWs	
				256	**			
000003E0	00020001 80000000			258	EOJPSW	DC	0D'0',X'0002000180000000',AD(0)	
000003F0	B2B2 81E0		000003E0	260	EOJ	LPSWE	EOJPSW	Normal completion
000003F8	00020001 80000000			262	FAILPSW	DC	0D'0',X'0002000180000000',AD(X'BAD')	
00000408	B2B2 81F8		000003F8	264	FAILTEST	LPSWE	FAILPSW	Abnormal termination
				266	**			
				267	*		Working Storage	
				268	**			
0000040C	00000000			270	CTLR0	DS	F	CR0
00000410	00000000			271		DS	F	
				272				
00000414	00001990			273	E6TADR	DC	A(E6TESTS)	address of E6 test table
00000418				275		LTORG ,		Literals pool
00000418	00000003			276			=XL4'3'	
0000041C	00000001			277			=F'1'	
00000420	0000			278			=H'0'	
00000422	005F			279			=AL2(L'MSGMSG)	
				280				
				281	*		some constants	
				282				
		00000400	00000001	283	K	EQU	1024	One KB
		00001000	00000001	284	PAGE	EQU	(4*K)	Size of one page
		00010000	00000001	285	K64	EQU	(64*K)	64 KB
		00100000	00000001	286	MB	EQU	(K*K)	1 MB
				287				
				288				
		AABBCCDD	00000001	289	REG2PATT	EQU	X'AABBCCDD'	Polluted Register pattern
		000000DD	00000001	290	REG2LOW	EQU	X'DD'	(last byte above)

```
   LOC        OBJECT CODE      ADDR1     ADDR2    STMT

                                                 292 *===============================================================================
                                                 293 *
                                                 294 *   NOTE: start data on an address that is easy to display
                                                 295 *         within Hercules
                                                 296 *
                                                 297 *===============================================================================
                                                 298
00000424                       00000424  00001000 299          ORG    ZVE6TST+X'1000'
00001000   00000000                               300 FAILED   DC     F'0'                        some test failed?


                                                 302 *******************************************************************************
                                                 303 *         TEST failed : CC message
                                                 304 *******************************************************************************
                                                 305 *
                                                 306 *         failed message and associated editting
                                                 307 *
00001004   40404040 40404040                      308 CCPRTLINE DC    C'         Test # '
00001014   A7A7A7                                 309 CCPRTNUM DC     C'xxx'
00001017   40A69996 95874083                      310          DC     c' wrong cc for instruction '
00001031   A7A7A7A7 A7A7A7A7                       311 CCPRTNAME DC    CL8'xxxxxxxx'
00001039   4085A797 8583A385                       312          DC     C' expected: cc='
00001047   A7                                      313 CCPRTEXP DC     C'x'
00001048   6B                                      314          DC     C','
00001049   40998583 8589A585                       315          DC     C' received: cc='
00001057   A7                                      316 CCPRTGOT DC     C'x'
00001058   4B                                      317          DC     C'.'
                               00000055  00000001 318 CCPRTLNG  EQU    *-CCPRTLINE
```

```
  LOC          OBJECT CODE        ADDR1     ADDR2     STMT

                                                      320 *****************************************************************************
                                                      321 *          TEST failed : message working storge
                                                      322 *****************************************************************************
00001059   40212020 20202020                          323 EDIT      DC     XL18'402120202020202020202020202020202020'
                                                      324
0000106B   7E7E7E6E                                   325           DC     C'===>'
0000106F   40404040 40404040                          326 PRT3      DC     CL18' '
00001081   4C7E7E7E                                   327           DC     C'<==='
00001085   00000000 00000000                          328 DECNUM    DS     CL16
                                                      329 *
                                                      330 *          CC extrtaction
                                                      331 *
00001098   00000000 00000000                          332 CCPSW     DS     2F            extract PSW after test (has CC)
000010A0   00                                         333 CCFOUND   DS     X             extracted cc


                                                      335 *****************************************************************************
                                                      336 *          Vector instruction results, pollution and input
                                                      337 *****************************************************************************
000010A8                                              338           DS     0FD
000010A8   AABBCCDD EEFFAABB                          339 R1FUDGE   DC     XL8'AABBCCDDEEFFAABB'                             R1 FUDGE
000010B0   00000000 00000000                          340           DS     XL16                                                gap
000010C0   00000000 00000000                          341 V1OUTPUT  DS     XL16                                             V1 OUTPUT
000010D0   00000000 00000000                          342           DS     XL16                                                gap
000010E0   00000000 00000000                          343 R1OUTPUT  DS     FD                                               R1 OUTPUT
000010E8   00000000 00000000                          344           DS     XL16                                                gap
000010F8   FFFFFFFF FFFFFFFF                          345 V1FUDGE   DC     XL16'FFFFFFFFFFFFFFFFFFFFFFFFFFFFFFFF'            V1 FUDGE
00001108   BBBBBBBB BBBBBBBB                          346 V1FUDGEB  DC     XL16'BBBBBBBBBBBBBBBBBBBBBBBBBBBBBBBB'            V1 FUDGE b
00001118   F1F2F3F4 F5F6F7F8                          347 V1INPUT   DC     CL16'1234567890123456'                          V1 input
00001128   F7F8F9F0 F1F2F3F4                          348           DC     CL14'78901234567890'
00001136   D9                                         349           DC     X'D9'
00001137   00000000 00000000                          350           DS     XL16                                                gap
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2    STMT

                                                 352 ********************************************************************
                                                 353 *         E6TEST DSECT
                                                 354 ********************************************************************

                                                 356 E6TEST    DSECT ,
00000000   00000000                              357 TSUB      DC    A(0)               pointer  to test
00000004   0000                                  358 TNUM      DC    H'00'              Test Number
00000006   00                                    359           DC    XL1'00'
00000007   00                                    360 M3        DC    HL1'00'            m3
00000008   00                                    361 CC        DC    HL1'00'            cc
00000009   00                                    362 CCMASK    DC    HL1'00'            not expected CC mask
                                                 363
0000000A   40404040 40404040                     364 OPNAME    DC    CL8' '             E6 name
                                                 365
00000014   00000000                              366 RELEN     DC    A(0)               RESULT LENGTH
00000018   00000000                              367 READDR    DC    A(0)               expected result address
                                                 368
                                                 369 **
                                                 370 *          test routine will be here (from VRR_H  macro)
                                                 371 * followed by
                                                 372 *          16-byte v1 source
                                                 373 *          16-byte v2 source
```

```
 LOC          OBJECT CODE      ADDR1      ADDR2    STMT

                                                   375 *****************************************************************************
                                                   376 *       Macros to help build test tables
                                                   377 *-------------------------------------------------------------------------
                                                   378 *       VRR_H Macro to help build test tables
                                                   379 *****************************************************************************
                                                   380          MACRO
                                                   381          VRR_H &INST,&MB,&CC
                                                   382 .*                                      &INST  - instruction under test
                                                   383 .*                                      &CC    - expected CC
                                                   384 .*
                                                   385          LCLA   &XCC(4)   &CC has mask values for FAILED condition codes
                                                   386 &XCC(1)  SETA   7                       CC != 0
                                                   387 &XCC(2)  SETA   11                      CC != 1
                                                   388 &XCC(3)  SETA   13                      CC != 2
                                                   389 &XCC(4)  SETA   14                      CC != 3
                                                   390
                                                   391          GBLA   &TNUM
                                                   392 &TNUM    SETA   &TNUM+1
                                                   393
                                                   394          DS     0FD
                                                   395          USING  *,R5                    base for test data and test routine
                                                   396
                                                   397 T&TNUM   DC     A(X&TNUM)               address of test routine
                                                   398          DC     H'&TNUM'                test number
                                                   399          DC     XL1'00'
                                                   400          DC     HL1'&MB'                m3
                                                   401          DC     HL1'&CC'                cc
                                                   402          DC     HL1'&XCC(&CC+1)'        cc failed mask
                                                   403
                                                   404          DC     CL8'&INST'             instruction name
                                                   405
                                                   406          DC     A(16)                   result length
                                                   407 REA&TNUM DC     A(RE&TNUM)              result address
                                                   408 .*
                                                   409 *                                      INSTRUCTION UNDER TEST ROUTINE
                                                   410 X&TNUM   DS     0F
                                                   411          VL     V1,RE&TNUM              get V1 source
                                                   412          VL     V2,RE&TNUM+16           get V2 source
                                                   413
                                                   414          &INST V1,V2,&MB               test instruction
                                                   415
                                                   416          EPSW   R2,R0                   exptract psw
                                                   417          ST     R2,CCPSW                   to save CC
                                                   418
                                                   419          BR     R11                     return
                                                   420
                                                   421 RE&TNUM  DC     0F
                                                   422          DROP   R5
                                                   423
                                                   424          MEND
```

```
  LOC         OBJECT CODE        ADDR1     ADDR2     STMT

                                                    426 *********************************************************************
                                                    427 *      PTTABLE Macro to generate table of pointers to individual tests
                                                    428 *********************************************************************
                                                    429
                                                    430           MACRO
                                                    431           PTTABLE
                                                    432           GBLA   &TNUM
                                                    433           LCLA   &CUR
                                                    434 &CUR      SETA   1
                                                    435 .*
                                                    436 TTABLE    DS     0F
                                                    437 .LOOP     ANOP
                                                    438 .*
                                                    439           DC     A(T&CUR)           address of test
                                                    440 .*
                                                    441 &CUR      SETA   &CUR+1
                                                    442           AIF    (&CUR LE &TNUM).LOOP
                                                    443 *
                                                    444           DC     A(0)               END OF TABLE
                                                    445           DC     A(0)
                                                    446 .*
                                                    447           MEND
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2    STMT

                                                449 ****************************************************************************
                                                450 *         E6 VRR_H tests
                                                451 ****************************************************************************
                          00000000  000019FF    452 ZVE6TST  CSECT ,
00001148                                        453          DS    0F


                                                455          PRINT DATA
                                                456 *
                                                457 *         E677 VCP     - VECTOR COMPARE DECIMAL
                                                458 *         VRR_H instr, m3, cc
                                                459 *             followed by
                                                460 *             v1    - 16 byte source
                                                461 *             v2    - 16 byte source
                                                462 *
                                                463 *----------------------------------------------------------------
                                                464 * VCP     - VECTOR COMPARE DECIMAL
                                                465 *----------------------------------------------------------------
                                                466 * VCP simple                                    m3= 0   (P1=0, P2=0)
                                                467 *                                               m3= 4   (P1=0, P2=1)
                                                468 *                                               m3= 8   (P1=1, P2=0)
                                                469 *                                               m3=12   (P1=1, P2=1)
                                                470 * m3= 0   (P1=0, P2=0)
                                                471          VRR_H VCP,0,0
00001148                                        472+         DS    0FD
00001148                          00001148      473+         USING *,R5              base for test data and test routine
00001148  00001164                              474+T1       DC    A(X1)             address of test routine
0000114C  0001                                  475+         DC    H'1'              test number
0000114E  00                                    476+         DC    XL1'00'
0000114F  00                                    477+         DC    HL1'0'            m3
00001150  00                                    478+         DC    HL1'0'            cc
00001151  07                                    479+         DC    HL1'7'            cc failed mask
00001152  E5C3D740 40404040                     480+         DC    CL8'VCP'          instruction name
0000115C  00000010                              481+         DC    A(16)             result length
00001160  00001180                              482+REA1     DC    A(RE1)            result address
                                                483+*                                INSTRUCTION UNDER TEST ROUTINE
00001164                                        484+X1       DS    0F
00001164  E710 5038 0006          00001180      485+         VL    V1,RE1            get V1 source
0000116A  E720 5048 0006          00001190      486+         VL    V2,RE1+16         get V2 source
00001170  E601 2000 0077                        487+         VCP   V1,V2,0           test instruction
00001176  B98D 0020                             488+         EPSW  R2,R0             exptract psw
0000117A  5020 8E98               00001098      489+         ST    R2,CCPSW              to save CC
0000117E  07FB                                  490+         BR    R11               return
00001180                                        491+RE1      DC    0F
00001180                                        492+         DROP  R5
00001180  00000000 00000000                     493          DC    XL16'00000000000000000001234500000000D'   V1 source
00001188  00123450 0000000D
00001190  00000000 00000000                     494          DC    XL16'00000000000000000001234500000000D'   V2 source
00001198  00123450 0000000D

                                                495
                                                496          VRR_H VCP,0,0
000011A0                                        497+         DS    0FD
000011A0                          000011A0      498+         USING *,R5              base for test data and test routine
000011A0  000011BC                              499+T2       DC    A(X2)             address of test routine
000011A4  0002                                  500+         DC    H'2'              test number
000011A6  00                                    501+         DC    XL1'00'
```

LOC	OBJECT CODE	ADDR1	ADDR2	STMT			
000011A7	00			502+	DC	HL1'0'	m3
000011A8	00			503+	DC	HL1'0'	cc
000011A9	07			504+	DC	HL1'7'	cc failed mask
000011AA	E5C3D740 40404040			505+	DC	CL8'VCP'	instruction name
000011B4	00000010			506+	DC	A(16)	result length
000011B8	000011D8			507+REA2	DC	A(RE2)	result address
				508+*			INSTRUCTION UNDER TEST ROUTINE
000011BC				509+X2	DS	0F	
000011BC	E710 5038 0006		000011D8	510+	VL	V1,RE2	get V1 source
000011C2	E720 5048 0006		000011E8	511+	VL	V2,RE2+16	get V2 source
000011C8	E601 2000 0077			512+	VCP	V1,V2,0	test instruction
000011CE	B98D 0020			513+	EPSW	R2,R0	exptract psw
000011D2	5020 8E98		00001098	514+	ST	R2,CCPSW	to save CC
000011D6	07FB			515+	BR	R11	return
000011D8				516+RE2	DC	0F	
000011D8				517+	DROP	R5	
000011D8	00000990 00000000			518	DC	XL16'00000990000000000001234500000000C'	V1 source
000011E0	00123450 0000000C						
000011E8	00000990 00000000			519	DC	XL16'00000990000000000001234500000000C'	V2 source
000011F0	00123450 0000000C						
				520			
				521	VRR_H	VCP,0,1	
000011F8				522+	DS	0FD	
000011F8		000011F8		523+	USING	*,R5	base for test data and test routine
000011F8	00001214			524+T3	DC	A(X3)	address of test routine
000011FC	0003			525+	DC	H'3'	test number
000011FE	00			526+	DC	XL1'00'	
000011FF	00			527+	DC	HL1'0'	m3
00001200	01			528+	DC	HL1'1'	cc
00001201	0B			529+	DC	HL1'11'	cc failed mask
00001202	E5C3D740 40404040			530+	DC	CL8'VCP'	instruction name
0000120C	00000010			531+	DC	A(16)	result length
00001210	00001230			532+REA3	DC	A(RE3)	result address
				533+*			INSTRUCTION UNDER TEST ROUTINE
00001214				534+X3	DS	0F	
00001214	E710 9030 0006		00001230	535+	VL	V1,RE3	get V1 source
0000121A	E720 9040 0006		00001240	536+	VL	V2,RE3+16	get V2 source
00001220	E601 2000 0077			537+	VCP	V1,V2,0	test instruction
00001226	B98D 0020			538+	EPSW	R2,R0	exptract psw
0000122A	5020 8E98		00001098	539+	ST	R2,CCPSW	to save CC
0000122E	07FB			540+	BR	R11	return
00001230				541+RE3	DC	0F	
00001230				542+	DROP	R5	
00001230	00000000 00000000			543	DC	XL16'00000000000000000001234500000000D'	V1 source
00001238	00123450 0000000D						
00001240	00000000 00000000			544	DC	XL16'00000000000000000001234500000000C'	V2 source
00001248	00123450 0000000C						
				545			
				546	VRR_H	VCP,0,1	
00001250				547+	DS	0FD	
00001250		00001250		548+	USING	*,R5	base for test data and test routine
00001250	0000126C			549+T4	DC	A(X4)	address of test routine
00001254	0004			550+	DC	H'4'	test number
00001256	00			551+	DC	XL1'00'	
00001257	00			552+	DC	HL1'0'	m3
00001258	01			553+	DC	HL1'1'	cc

```
  LOC          OBJECT CODE        ADDR1      ADDR2      STMT

00001259  0B                                           554+          DC    HL1'11'                 cc failed mask
0000125A  E5C3D740 40404040                            555+          DC    CL8'VCP'                instruction name
00001264  00000010                                     556+          DC    A(16)                   result length
00001268  00001288                                     557+REA4      DC    A(RE4)                  result address
                                                        558+*                                       INSTRUCTION UNDER TEST ROUTINE
0000126C                                               559+X4        DS    0F
0000126C  E710 5038 0006                    00001288   560+          VL    V1,RE4                  get V1 source
00001272  E720 5048 0006                    00001298   561+          VL    V2,RE4+16               get V2 source
00001278  E601 2000 0077                               562+          VCP   V1,V2,0                 test instruction
0000127E  B98D 0020                                    563+          EPSW  R2,R0                   exptract psw
00001282  5020 8E98                         00001098   564+          ST    R2,CCPSW                    to save CC
00001286  07FB                                         565+          BR    R11                     return
00001288                                               566+RE4       DC    0F
00001288                                               567+          DROP  R5
00001288  00000990 00000000                            568           DC    XL16'00000990000000000000234500000000C'   V1 source
00001290  00023450 0000000C
00001298  00000990 00000000                            569           DC    XL16'00000990000000000001234500000000C'   V2 source
000012A0  00123450 0000000C

                                                        570
                                                        571           VRR_H VCP,0,2
000012A8                                               572+          DS    0FD
000012A8                         000012A8              573+          USING *,R5               base for test data and test routine
000012A8  000012C4                                     574+T5        DC    A(X5)                   address of test routine
000012AC  0005                                         575+          DC    H'5'                    test number
000012AE  00                                           576+          DC    XL1'00'
000012AF  00                                           577+          DC    HL1'0'                  m3
000012B0  02                                           578+          DC    HL1'2'                  cc
000012B1  0D                                           579+          DC    HL1'13'                 cc failed mask
000012B2  E5C3D740 40404040                            580+          DC    CL8'VCP'                instruction name
000012BC  00000010                                     581+          DC    A(16)                   result length
000012C0  000012E0                                     582+REA5      DC    A(RE5)                  result address
                                                        583+*                                       INSTRUCTION UNDER TEST ROUTINE
000012C4                                               584+X5        DS    0F
000012C4  E710 5038 0006                    000012E0   585+          VL    V1,RE5                  get V1 source
000012CA  E720 5048 0006                    000012F0   586+          VL    V2,RE5+16               get V2 source
000012D0  E601 2000 0077                               587+          VCP   V1,V2,0                 test instruction
000012D6  B98D 0020                                    588+          EPSW  R2,R0                   exptract psw
000012DA  5020 8E98                         00001098   589+          ST    R2,CCPSW                    to save CC
000012DE  07FB                                         590+          BR    R11                     return
000012E0                                               591+RE5       DC    0F
000012E0                                               592+          DROP  R5
000012E0  00000000 00000000                            593           DC    XL16'00000000000000000001234500000000C'   V1 source
000012E8  00123450 0000000C
000012F0  00000000 00000000                            594           DC    XL16'00000000000000000001234500000000D'   V2 source
000012F8  00123450 0000000D

                                                        595
                                                        596           VRR_H VCP,0,2
00001300                                               597+          DS    0FD
00001300                         00001300              598+          USING *,R5               base for test data and test routine
00001300  0000131C                                     599+T6        DC    A(X6)                   address of test routine
00001304  0006                                         600+          DC    H'6'                    test number
00001306  00                                           601+          DC    XL1'00'
00001307  00                                           602+          DC    HL1'0'                  m3
00001308  02                                           603+          DC    HL1'2'                  cc
00001309  0D                                           604+          DC    HL1'13'                 cc failed mask
0000130A  E5C3D740 40404040                            605+          DC    CL8'VCP'                instruction name
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

00001314  00000010                               606+        DC      A(16)                 result length
00001318  00001338                               607+REA6    DC      A(RE6)                result address
                                                 608+*                                     INSTRUCTION UNDER TEST ROUTINE
0000131C                                         609+X6      DS      0F
0000131C  E710 5038 0006            00001338     610+        VL      V1,RE6                get V1 source
00001322  E720 5048 0006            00001348     611+        VL      V2,RE6+16             get V2 source
00001328  E601 2000 0077                         612+        VCP     V1,V2,0               test instruction
0000132E  B98D 0020                              613+        EPSW    R2,R0                 exptract psw
00001332  5020 8E98                 00001098     614+        ST      R2,CCPSW                  to save CC
00001336  07FB                                   615+        BR      R11                   return
00001338                                         616+RE6     DC      0F
00001338                                         617+        DROP    R5
00001338  00000990 00000000                      618         DC      XL16'0000099000000000001234500000000C'    V1 source
00001340  00123450 0000000C
00001348  00000990 00000000                      619         DC      XL16'0000099000000000002345000000000C'    V2 source
00001350  00023450 0000000C

                                                 620
                                                 621 * m3= 4    (P1=0, P2=1)
                                                 622         VRR_H VCP,4,1
00001358                                         623+        DS      0FD
00001358                     00001358            624+        USING *,R5             base for test data and test routine
00001358  00001374                               625+T7      DC      A(X7)                 address of test routine
0000135C  0007                                   626+        DC      H'7'                  test number
0000135E  00                                     627+        DC      XL1'00'
0000135F  04                                     628+        DC      HL1'4'                m3
00001360  01                                     629+        DC      HL1'1'                cc
00001361  0B                                     630+        DC      HL1'11'               cc failed mask
00001362  E5C3D740 40404040                      631+        DC      CL8'VCP'              instruction name
0000136C  00000010                               632+        DC      A(16)                 result length
00001370  00001390                               633+REA7    DC      A(RE7)                result address
                                                 634+*                                     INSTRUCTION UNDER TEST ROUTINE
00001374                                         635+X7      DS      0F
00001374  E710 5038 0006            00001390     636+        VL      V1,RE7                get V1 source
0000137A  E720 5048 0006            000013A0     637+        VL      V2,RE7+16             get V2 source
00001380  E601 2040 0077                         638+        VCP     V1,V2,4               test instruction
00001386  B98D 0020                              639+        EPSW    R2,R0                 exptract psw
0000138A  5020 8E98                 00001098     640+        ST      R2,CCPSW                  to save CC
0000138E  07FB                                   641+        BR      R11                   return
00001390                                         642+RE7     DC      0F
00001390                                         643+        DROP    R5
00001390  00000000 00000000                      644         DC      XL16'0000000000000000001234500000000D'    V1 source
00001398  00123450 0000000D
000013A0  00000000 00000000                      645         DC      XL16'0000000000000000001234500000000D'    V2 source
000013A8  00123450 0000000D

                                                 646
                                                 647         VRR_H VCP,4,0
000013B0                                         648+        DS      0FD
000013B0                     000013B0            649+        USING *,R5             base for test data and test routine
000013B0  000013CC                               650+T8      DC      A(X8)                 address of test routine
000013B4  0008                                   651+        DC      H'8'                  test number
000013B6  00                                     652+        DC      XL1'00'
000013B7  04                                     653+        DC      HL1'4'                m3
000013B8  00                                     654+        DC      HL1'0'                cc
000013B9  07                                     655+        DC      HL1'7'                cc failed mask
000013BA  E5C3D740 40404040                      656+        DC      CL8'VCP'              instruction name
000013C4  00000010                               657+        DC      A(16)                 result length
```

```
 LOC          OBJECT CODE      ADDR1     ADDR2     STMT

000013C8  000013E8                                658+REA8    DC      A(RE8)              result address
                                                  659+*                                  INSTRUCTION UNDER TEST ROUTINE
000013CC                                          660+X8      DS      0F
000013CC  E710 5038 0006                000013E8  661+        VL      V1,RE8              get V1 source
000013D2  E720 5048 0006                000013F8  662+        VL      V2,RE8+16           get V2 source
000013D8  E601 2040 0077                          663+        VCP     V1,V2,4             test instruction
000013DE  B98D 0020                               664+        EPSW    R2,R0               exptract psw
000013E2  5020 8E98                     00001098  665+        ST      R2,CCPSW               to save CC
000013E6  07FB                                    666+        BR      R11                 return
000013E8                                          667+RE8     DC      0F
000013E8                                          668+        DROP    R5
000013E8  00000990 00000000                       669         DC      XL16'00000990000000000001234500000000C'    V1 source
000013F0  00123450 0000000C
000013F8  00000990 00000000                       670         DC      XL16'00000990000000000001234500000000C'    V2 source
00001400  00123450 0000000C
                                                  671
                                                  672         VRR_H VCP,4,1
00001408                                          673+        DS      0FD
00001408                      00001408            674+        USING   *,R5                base for test data and test routine
00001408  00001424                                675+T9      DC      A(X9)               address of test routine
0000140C  0009                                    676+        DC      H'9'                test number
0000140E  00                                      677+        DC      XL1'00'
0000140F  04                                      678+        DC      HL1'4'              m3
00001410  01                                      679+        DC      HL1'1'              cc
00001411  0B                                      680+        DC      HL1'11'             cc failed mask
00001412  E5C3D740 40404040                       681+        DC      CL8'VCP'            instruction name
0000141C  00000010                                682+        DC      A(16)               result length
00001420  00001440                                683+REA9    DC      A(RE9)              result address
                                                  684+*                                  INSTRUCTION UNDER TEST ROUTINE
00001424                                          685+X9      DS      0F
00001424  E710 5038 0006                00001440  686+        VL      V1,RE9              get V1 source
0000142A  E720 5048 0006                00001450  687+        VL      V2,RE9+16           get V2 source
00001430  E601 2040 0077                          688+        VCP     V1,V2,4             test instruction
00001436  B98D 0020                               689+        EPSW    R2,R0               exptract psw
0000143A  5020 8E98                     00001098  690+        ST      R2,CCPSW               to save CC
0000143E  07FB                                    691+        BR      R11                 return
00001440                                          692+RE9     DC      0F
00001440                                          693+        DROP    R5
00001440  00000000 00000000                       694         DC      XL16'00000000000000000001234500000000D'    V1 source
00001448  00123450 0000000D
00001450  00000000 00000000                       695         DC      XL16'00000000000000000001234500000000C'    V2 source
00001458  00123450 0000000C
                                                  696
                                                  697         VRR_H VCP,4,1
00001460                                          698+        DS      0FD
00001460                      00001460            699+        USING   *,R5                base for test data and test routine
00001460  0000147C                                700+T10     DC      A(X10)              address of test routine
00001464  000A                                    701+        DC      H'10'               test number
00001466  00                                      702+        DC      XL1'00'
00001467  04                                      703+        DC      HL1'4'              m3
00001468  01                                      704+        DC      HL1'1'              cc
00001469  0B                                      705+        DC      HL1'11'             cc failed mask
0000146A  E5C3D740 40404040                       706+        DC      CL8'VCP'            instruction name
00001474  00000010                                707+        DC      A(16)               result length
00001478  00001498                                708+REA10   DC      A(RE10)             result address
                                                  709+*                                  INSTRUCTION UNDER TEST ROUTINE
```

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  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

0000147C                                          710+X10       DS      0F
0000147C  E710 5038 0006               00001498   711+          VL      V1,RE10             get V1 source
00001482  E720 5048 0006               000014A8   712+          VL      V2,RE10+16          get V2 source
00001488  E601 2040 0077                          713+          VCP     V1,V2,4             test instruction
0000148E  B98D 0020                               714+          EPSW    R2,R0               exptract psw
00001492  5020 8E98                    00001098   715+          ST      R2,CCPSW                to save CC
00001496  07FB                                    716+          BR      R11                 return
00001498                                          717+RE10      DC      0F
00001498                                          718+          DROP    R5
00001498  00000990 00000000                       719           DC      XL16'00000990000000000002345000000000C'    V1 source
000014A0  00023450 0000000C
000014A8  00000990 00000000                       720           DC      XL16'00000990000000000001234500000000C'    V2 source
000014B0  00123450 0000000C

                                                  721
                                                  722           VRR_H VCP,4,0
000014B8                                          723+          DS      0FD
000014B8                     000014B8             724+          USING *,R5                  base for test data and test routine
000014B8  000014D4                                725+T11       DC      A(X11)              address of test routine
000014BC  000B                                    726+          DC      H'11'               test number
000014BE  00                                      727+          DC      XL1'00'
000014BF  04                                      728+          DC      HL1'4'              m3
000014C0  00                                      729+          DC      HL1'0'              cc
000014C1  07                                      730+          DC      HL1'7'              cc failed mask
000014C2  E5C3D740 40404040                       731+          DC      CL8'VCP'            instruction name
000014CC  00000010                                732+          DC      A(16)               result length
000014D0  000014F0                                733+REA11     DC      A(RE11)             result address
                                                  734+*                                     INSTRUCTION UNDER TEST ROUTINE
000014D4                                          735+X11       DS      0F
000014D4  E710 5038 0006               000014F0   736+          VL      V1,RE11             get V1 source
000014DA  E720 5048 0006               00001500   737+          VL      V2,RE11+16          get V2 source
000014E0  E601 2040 0077                          738+          VCP     V1,V2,4             test instruction
000014E6  B98D 0020                               739+          EPSW    R2,R0               exptract psw
000014EA  5020 8E98                    00001098   740+          ST      R2,CCPSW                to save CC
000014EE  07FB                                    741+          BR      R11                 return
000014F0                                          742+RE11      DC      0F
000014F0                                          743+          DROP    R5
000014F0  00000000 00000000                       744           DC      XL16'00000000000000000001234500000000C'    V1 source
000014F8  00123450 0000000C
00001500  00000000 00000000                       745           DC      XL16'00000000000000000001234500000000D'    V2 source
00001508  00123450 0000000D

                                                  746
                                                  747           VRR_H VCP,4,2
00001510                                          748+          DS      0FD
00001510                     00001510             749+          USING *,R5                  base for test data and test routine
00001510  0000152C                                750+T12       DC      A(X12)              address of test routine
00001514  000C                                    751+          DC      H'12'               test number
00001516  00                                      752+          DC      XL1'00'
00001517  04                                      753+          DC      HL1'4'              m3
00001518  02                                      754+          DC      HL1'2'              cc
00001519  0D                                      755+          DC      HL1'13'             cc failed mask
0000151A  E5C3D740 40404040                       756+          DC      CL8'VCP'            instruction name
00001524  00000010                                757+          DC      A(16)               result length
00001528  00001548                                758+REA12     DC      A(RE12)             result address
                                                  759+*                                     INSTRUCTION UNDER TEST ROUTINE
0000152C                                          760+X12       DS      0F
0000152C  E710 5038 0006               00001548   761+          VL      V1,RE12             get V1 source
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001532  E720 5048 0006                00001558  762+          VL    V2,RE12+16           get V2 source
00001538  E601 2040 0077                          763+          VCP   V1,V2,4              test instruction
0000153E  B98D 0020                               764+          EPSW  R2,R0                exptract psw
00001542  5020 8E98                     00001098  765+          ST    R2,CCPSW                to save CC
00001546  07FB                                    766+          BR    R11                  return
00001548                                          767+RE12      DC    0F
00001548                                          768+          DROP  R5
00001548  00000990 00000000                       769          DC    XL16'00000990000000000001234500000000C'     V1 source
00001550  00123450 0000000C
00001558  00000990 00000000                       770          DC    XL16'00000990000000000002345000000000C'     V2 source
00001560  00023450 0000000C
                                                  771
                                                  772 * m3= 8   (P1=1, P2=0)
                                                  773          VRR_H VCP,8,2
00001568                                          774+          DS    0FD
00001568                          00001568        775+          USING *,R5                 base for test data and test routine
00001568  00001584                                776+T13       DC    A(X13)                address of test routine
0000156C  000D                                    777+          DC    H'13'                 test number
0000156E  00                                      778+          DC    XL1'00'
0000156F  08                                      779+          DC    HL1'8'                m3
00001570  02                                      780+          DC    HL1'2'                cc
00001571  0D                                      781+          DC    HL1'13'               cc failed mask
00001572  E5C3D740 40404040                       782+          DC    CL8'VCP'              instruction name
0000157C  00000010                                783+          DC    A(16)                 result length
00001580  000015A0                                784+REA13     DC    A(RE13)               result address
                                                  785+*                                    INSTRUCTION UNDER TEST ROUTINE
00001584                                          786+X13       DS    0F
00001584  E710 5038 0006                000015A0  787+          VL    V1,RE13              get V1 source
0000158A  E720 5048 0006                000015B0  788+          VL    V2,RE13+16           get V2 source
00001590  E601 2080 0077                          789+          VCP   V1,V2,8              test instruction
00001596  B98D 0020                               790+          EPSW  R2,R0                exptract psw
0000159A  5020 8E98                     00001098  791+          ST    R2,CCPSW                to save CC
0000159E  07FB                                    792+          BR    R11                  return
000015A0                                          793+RE13      DC    0F
000015A0                                          794+          DROP  R5
000015A0  00000000 00000000                       795          DC    XL16'00000000000000000001234500000000D'     V1 source
000015A8  00123450 0000000D
000015B0  00000000 00000000                       796          DC    XL16'00000000000000000001234500000000D'     V2 source
000015B8  00123450 0000000D
                                                  797
                                                  798          VRR_H VCP,8,0
000015C0                                          799+          DS    0FD
000015C0                          000015C0        800+          USING *,R5                 base for test data and test routine
000015C0  000015DC                                801+T14       DC    A(X14)                address of test routine
000015C4  000E                                    802+          DC    H'14'                 test number
000015C6  00                                      803+          DC    XL1'00'
000015C7  08                                      804+          DC    HL1'8'                m3
000015C8  00                                      805+          DC    HL1'0'                cc
000015C9  07                                      806+          DC    HL1'7'                cc failed mask
000015CA  E5C3D740 40404040                       807+          DC    CL8'VCP'              instruction name
000015D4  00000010                                808+          DC    A(16)                 result length
000015D8  000015F8                                809+REA14     DC    A(RE14)               result address
                                                  810+*                                    INSTRUCTION UNDER TEST ROUTINE
000015DC                                          811+X14       DS    0F
000015DC  E710 5038 0006                000015F8  812+          VL    V1,RE14              get V1 source
000015E2  E720 5048 0006                00001608  813+          VL    V2,RE14+16           get V2 source
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

000015E8  E601 2080 0077                          814+        VCP    V1,V2,8          test instruction
000015EE  B98D 0020                               815+        EPSW   R2,R0           exptract psw
000015F2  5020 8E98                    00001098   816+        ST     R2,CCPSW            to save CC
000015F6  07FB                                    817+        BR     R11             return
000015F8                                          818+RE14    DC     0F
000015F8                                          819+        DROP   R5
000015F8  00000990 00000000                       820         DC     XL16'00000990000000000001234500000000C'     V1 source
00001600  00123450 0000000C
00001608  00000990 00000000                       821         DC     XL16'00000990000000000001234500000000C'     V2 source
00001610  00123450 0000000C

                                                  822
                                                  823         VRR_H  VCP,8,0
00001618                                          824+        DS     0FD
00001618                                00001618  825+        USING  *,R5             base for test data and test routine
00001618  00001634                                826+T15     DC     A(X15)           address of test routine
0000161C  000F                                    827+        DC     H'15'            test number
0000161E  00                                      828+        DC     XL1'00'
0000161F  08                                      829+        DC     HL1'8'           m3
00001620  00                                      830+        DC     HL1'0'           cc
00001621  07                                      831+        DC     HL1'7'           cc failed mask
00001622  E5C3D740 40404040                       832+        DC     CL8'VCP'         instruction name
0000162C  00000010                                833+        DC     A(16)            result length
00001630  00001650                                834+REA15   DC     A(RE15)          result address
                                                  835+*                               INSTRUCTION UNDER TEST ROUTINE
00001634                                          836+X15     DS     0F
00001634  E710 5038 0006              00001650    837+        VL     V1,RE15          get V1 source
0000163A  E720 5048 0006              00001660    838+        VL     V2,RE15+16       get V2 source
00001640  E601 2080 0077                          839+        VCP    V1,V2,8          test instruction
00001646  B98D 0020                               840+        EPSW   R2,R0           exptract psw
0000164A  5020 8E98                    00001098   841+        ST     R2,CCPSW            to save CC
0000164E  07FB                                    842+        BR     R11             return
00001650                                          843+RE15    DC     0F
00001650                                          844+        DROP   R5
00001650  00000000 00000000                       845         DC     XL16'00000000000000000001234500000000D'     V1 source
00001658  00123450 0000000D
00001660  00000000 00000000                       846         DC     XL16'00000000000000000001234500000000C'     V2 source
00001668  00123450 0000000C

                                                  847
                                                  848         VRR_H  VCP,8,1
00001670                                          849+        DS     0FD
00001670                                00001670  850+        USING  *,R5             base for test data and test routine
00001670  0000168C                                851+T16     DC     A(X16)           address of test routine
00001674  0010                                    852+        DC     H'16'            test number
00001676  00                                      853+        DC     XL1'00'
00001677  08                                      854+        DC     HL1'8'           m3
00001678  01                                      855+        DC     HL1'1'           cc
00001679  0B                                      856+        DC     HL1'11'          cc failed mask
0000167A  E5C3D740 40404040                       857+        DC     CL8'VCP'         instruction name
00001684  00000010                                858+        DC     A(16)            result length
00001688  000016A8                                859+REA16   DC     A(RE16)          result address
                                                  860+*                               INSTRUCTION UNDER TEST ROUTINE
0000168C                                          861+X16     DS     0F
0000168C  E710 5038 0006              000016A8    862+        VL     V1,RE16          get V1 source
00001692  E720 5048 0006              000016B8    863+        VL     V2,RE16+16       get V2 source
00001698  E601 2080 0077                          864+        VCP    V1,V2,8          test instruction
0000169E  B98D 0020                               865+        EPSW   R2,R0           exptract psw
```

```
  LOC          OBJECT CODE      ADDR1     ADDR2     STMT

000016A2  5020 8E98                       00001098  866+          ST     R2,CCPSW               to save CC
000016A6  07FB                                      867+          BR     R11             return
000016A8                                            868+RE16      DC     0F
000016A8                                            869+          DROP   R5
000016A8  00000990 00000000                         870          DC     XL16'00000990000000000000234500000000C'     V1 source
000016B0  00023450 0000000C
000016B8  00000990 00000000                         871          DC     XL16'00000990000000000001234500000000C'     V2 source
000016C0  00123450 0000000C
                                                    872
                                                    873          VRR_H VCP,8,2
000016C8                                            874+          DS     0FD
000016C8                    000016C8               875+          USING *,R5             base for test data and test routine
000016C8  000016E4                                  876+T17      DC     A(X17)                address of test routine
000016CC  0011                                      877+          DC     H'17'                 test number
000016CE  00                                        878+          DC     XL1'00'
000016CF  08                                        879+          DC     HL1'8'                m3
000016D0  02                                        880+          DC     HL1'2'                cc
000016D1  0D                                        881+          DC     HL1'13'               cc failed mask
000016D2  E5C3D740 40404040                         882+          DC     CL8'VCP'              instruction name
000016DC  00000010                                  883+          DC     A(16)                 result length
000016E0  00001700                                  884+REA17    DC     A(RE17)               result address
                                                    885+*                                INSTRUCTION UNDER TEST ROUTINE
000016E4                                            886+X17       DS     0F
000016E4  E710 5038 0006                  00001700  887+          VL     V1,RE17               get V1 source
000016EA  E720 5048 0006                  00001710  888+          VL     V2,RE17+16            get V2 source
000016F0  E601 2080 0077                            889+          VCP    V1,V2,8               test instruction
000016F6  B98D 0020                                 890+          EPSW   R2,R0                 exptract psw
000016FA  5020 8E98                       00001098  891+          ST     R2,CCPSW               to save CC
000016FE  07FB                                      892+          BR     R11             return
00001700                                            893+RE17      DC     0F
00001700                                            894+          DROP   R5
00001700  00000000 00000000                         895          DC     XL16'00000000000000000001234500000000C'     V1 source
00001708  00123450 0000000C
00001710  00000000 00000000                         896          DC     XL16'00000000000000000001234500000000D'     V2 source
00001718  00123450 0000000D
                                                    897
                                                    898          VRR_H VCP,8,2
00001720                                            899+          DS     0FD
00001720                    00001720               900+          USING *,R5             base for test data and test routine
00001720  0000173C                                  901+T18      DC     A(X18)                address of test routine
00001724  0012                                      902+          DC     H'18'                 test number
00001726  00                                        903+          DC     XL1'00'
00001727  08                                        904+          DC     HL1'8'                m3
00001728  02                                        905+          DC     HL1'2'                cc
00001729  0D                                        906+          DC     HL1'13'               cc failed mask
0000172A  E5C3D740 40404040                         907+          DC     CL8'VCP'              instruction name
00001734  00000010                                  908+          DC     A(16)                 result length
00001738  00001758                                  909+REA18    DC     A(RE18)               result address
                                                    910+*                                INSTRUCTION UNDER TEST ROUTINE
0000173C                                            911+X18       DS     0F
0000173C  E710 5038 0006                  00001758  912+          VL     V1,RE18               get V1 source
00001742  E720 5048 0006                  00001768  913+          VL     V2,RE18+16            get V2 source
00001748  E601 2080 0077                            914+          VCP    V1,V2,8               test instruction
0000174E  B98D 0020                                 915+          EPSW   R2,R0                 exptract psw
00001752  5020 8E98                       00001098  916+          ST     R2,CCPSW               to save CC
00001756  07FB                                      917+          BR     R11             return
```

```
  LOC        OBJECT CODE       ADDR1     ADDR2     STMT

00001758                                           918+RE18    DC    0F
00001758                                           919+        DROP  R5
00001758   00000990 00000000                       920         DC    XL16'00000990000000000001234500000000C'    V1 source
00001760   00123450 0000000C
00001768   00000990 00000000                       921         DC    XL16'00000990000000000002345000000000C'    V2 source
00001770   00023450 0000000C
                                                   922
                                                   923 * m3=12   (P1=1, P2=1)
                                                   924         VRR_H VCP, 12, 0
00001778                                           925+        DS    0FD
00001778                               00001778    926+        USING *, R5                 base for test data and test routine
00001778   00001794                                927+T19     DC    A(X19)                 address of test routine
0000177C   0013                                    928+        DC    H'19'                  test number
0000177E   00                                      929+        DC    XL1'00'
0000177F   0C                                      930+        DC    HL1'12'                m3
00001780   00                                      931+        DC    HL1'0'                 cc
00001781   07                                      932+        DC    HL1'7'                 cc failed mask
00001782   E5C3D740 40404040                       933+        DC    CL8'VCP'               instruction name
0000178C   00000010                                934+        DC    A(16)                  result length
00001790   000017B0                                935+REA19   DC    A(RE19)                result address
                                                   936+*                                   INSTRUCTION UNDER TEST ROUTINE
00001794                                           937+X19     DS    0F
00001794   E710 5038 0006              000017B0    938+        VL    V1, RE19               get V1 source
0000179A   E720 5048 0006              000017C0    939+        VL    V2, RE19+16            get V2 source
000017A0   E601 20C0 0077                           940+        VCP   V1, V2, 12             test instruction
000017A6   B98D 0020                               941+        EPSW  R2, R0                 exptract psw
000017AA   5020 8E98                   00001098    942+        ST    R2, CCPSW                  to save CC
000017AE   07FB                                    943+        BR    R11                    return
000017B0                                           944+RE19    DC    0F
000017B0                                           945+        DROP  R5
000017B0   00000000 00000000                       946         DC    XL16'00000000000000000001234500000000D'    V1 source
000017B8   00123450 0000000D
000017C0   00000000 00000000                       947         DC    XL16'00000000000000000001234500000000D'    V2 source
000017C8   00123450 0000000D
                                                   948
                                                   949         VRR_H VCP, 12, 0
000017D0                                           950+        DS    0FD
000017D0                               000017D0    951+        USING *, R5                 base for test data and test routine
000017D0   000017EC                                952+T20     DC    A(X20)                 address of test routine
000017D4   0014                                    953+        DC    H'20'                  test number
000017D6   00                                      954+        DC    XL1'00'
000017D7   0C                                      955+        DC    HL1'12'                m3
000017D8   00                                      956+        DC    HL1'0'                 cc
000017D9   07                                      957+        DC    HL1'7'                 cc failed mask
000017DA   E5C3D740 40404040                       958+        DC    CL8'VCP'               instruction name
000017E4   00000010                                959+        DC    A(16)                  result length
000017E8   00001808                                960+REA20   DC    A(RE20)                result address
                                                   961+*                                   INSTRUCTION UNDER TEST ROUTINE
000017EC                                           962+X20     DS    0F
000017EC   E710 5038 0006              00001808    963+        VL    V1, RE20               get V1 source
000017F2   E720 5048 0006              00001818    964+        VL    V2, RE20+16            get V2 source
000017F8   E601 20C0 0077                           965+        VCP   V1, V2, 12             test instruction
000017FE   B98D 0020                               966+        EPSW  R2, R0                 exptract psw
00001802   5020 8E98                   00001098    967+        ST    R2, CCPSW                  to save CC
00001806   07FB                                    968+        BR    R11                    return
00001808                                           969+RE20    DC    0F
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

 00001808                                         970+          DROP   R5
 00001808   00000990 00000000                     971           DC     XL16'0000099000000000001234500000000C'    V1 source
 00001810   00123450 0000000C
 00001818   00000990 00000000                     972           DC     XL16'0000099000000000001234500000000C'    V2 source
 00001820   00123450 0000000C
                                                  973
                                                  974           VRR_H  VCP,12,0
 00001828                                         975+          DS     0FD
 00001828                       00001828          976+          USING  *,R5                base for test data and test routine
 00001828   00001844                              977+T21       DC     A(X21)              address of test routine
 0000182C   0015                                  978+          DC     H'21'               test number
 0000182E   00                                    979+          DC     XL1'00'
 0000182F   0C                                    980+          DC     HL1'12'             m3
 00001830   00                                    981+          DC     HL1'0'              cc
 00001831   07                                    982+          DC     HL1'7'              cc failed mask
 00001832   E5C3D740 40404040                     983+          DC     CL8'VCP'            instruction name
 0000183C   00000010                              984+          DC     A(16)               result length
 00001840   00001860                              985+REA21     DC     A(RE21)             result address
                                                  986+*                                    INSTRUCTION UNDER TEST ROUTINE
 00001844                                         987+X21       DS     0F
 00001844   E710 5038 0006                00001860 988+         VL     V1,RE21             get V1 source
 0000184A   E720 5048 0006                00001870 989+         VL     V2,RE21+16          get V2 source
 00001850   E601 20C0 0077                         990+         VCP    V1,V2,12            test instruction
 00001856   B98D 0020                              991+         EPSW   R2,R0               exptract psw
 0000185A   5020 8E98                     00001098 992+         ST     R2,CCPSW                to save CC
 0000185E   07FB                                   993+         BR     R11                 return
 00001860                                          994+RE21     DC     0F
 00001860                                          995+          DROP   R5
 00001860   00000000 00000000                      996           DC     XL16'0000000000000000001234500000000D'    V1 source
 00001868   00123450 0000000D
 00001870   00000000 00000000                      997           DC     XL16'0000000000000000001234500000000C'    V2 source
 00001878   00123450 0000000C
                                                   998
                                                   999          VRR_H  VCP,12,1
 00001880                                          1000+         DS     0FD
 00001880                       00001880           1001+         USING  *,R5                base for test data and test routine
 00001880   0000189C                               1002+T22      DC     A(X22)              address of test routine
 00001884   0016                                   1003+         DC     H'22'               test number
 00001886   00                                     1004+         DC     XL1'00'
 00001887   0C                                     1005+         DC     HL1'12'             m3
 00001888   01                                     1006+         DC     HL1'1'              cc
 00001889   0B                                     1007+         DC     HL1'11'             cc failed mask
 0000188A   E5C3D740 40404040                      1008+         DC     CL8'VCP'            instruction name
 00001894   00000010                               1009+         DC     A(16)               result length
 00001898   000018B8                               1010+REA22    DC     A(RE22)             result address
                                                   1011+*                                   INSTRUCTION UNDER TEST ROUTINE
 0000189C                                          1012+X22      DS     0F
 0000189C   E710 5038 0006                000018B8  1013+         VL     V1,RE22             get V1 source
 000018A2   E720 5048 0006                000018C8  1014+         VL     V2,RE22+16          get V2 source
 000018A8   E601 20C0 0077                          1015+         VCP    V1,V2,12            test instruction
 000018AE   B98D 0020                               1016+         EPSW   R2,R0               exptract psw
 000018B2   5020 8E98                     00001098  1017+         ST     R2,CCPSW                to save CC
 000018B6   07FB                                    1018+         BR     R11                 return
 000018B8                                           1019+RE22    DC     0F
 000018B8                                           1020+         DROP   R5
 000018B8   00000990 00000000                       1021          DC     XL16'0000099000000000002345000000000C'    V1 source
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

000018C0   00023450 0000000C
000018C8   00000990 00000000           1022         DC     XL16'00000990000000000001234500000000C'     V2 source
000018D0   00123450 0000000C
                                        1023
                                        1024         VRR_H VCP,12,0
000018D8                                1025+        DS     0FD
000018D8                    000018D8    1026+        USING  *,R5                    base for test data and test routine
000018D8   000018F4                     1027+T23     DC     A(X23)                  address of test routine
000018DC   0017                         1028+        DC     H'23'                   test number
000018DE   00                           1029+        DC     XL1'00'
000018DF   0C                           1030+        DC     HL1'12'                 m3
000018E0   00                           1031+        DC     HL1'0'                  cc
000018E1   07                           1032+        DC     HL1'7'                  cc failed mask
000018E2   E5C3D740 40404040            1033+        DC     CL8'VCP'                instruction name
000018EC   00000010                     1034+        DC     A(16)                   result length
000018F0   00001910                     1035+REA23   DC     A(RE23)                 result address
                                        1036+*                                      INSTRUCTION UNDER TEST ROUTINE
000018F4                                1037+X23     DS     0F
000018F4   E710 5038 0006      00001910 1038+        VL     V1,RE23                 get V1 source
000018FA   E720 5048 0006      00001920 1039+        VL     V2,RE23+16              get V2 source
00001900   E601 20C0 0077               1040+        VCP    V1,V2,12                test instruction
00001906   B98D 0020                    1041+        EPSW   R2,R0                   exptract psw
0000190A   5020 8E98           00001098 1042+        ST     R2,CCPSW                   to save CC
0000190E   07FB                         1043+        BR     R11                     return
00001910                                1044+RE23    DC     0F
00001910                                1045+        DROP   R5
00001910   00000000 00000000            1046         DC     XL16'00000000000000000001234500000000C'     V1 source
00001918   00123450 0000000C
00001920   00000000 00000000            1047         DC     XL16'00000000000000000001234500000000D'     V2 source
00001928   00123450 0000000D
                                        1048
                                        1049         VRR_H VCP,12,2
00001930                                1050+        DS     0FD
00001930                    00001930    1051+        USING  *,R5                    base for test data and test routine
00001930   0000194C                     1052+T24     DC     A(X24)                  address of test routine
00001934   0018                         1053+        DC     H'24'                   test number
00001936   00                           1054+        DC     XL1'00'
00001937   0C                           1055+        DC     HL1'12'                 m3
00001938   02                           1056+        DC     HL1'2'                  cc
00001939   0D                           1057+        DC     HL1'13'                 cc failed mask
0000193A   E5C3D740 40404040            1058+        DC     CL8'VCP'                instruction name
00001944   00000010                     1059+        DC     A(16)                   result length
00001948   00001968                     1060+REA24   DC     A(RE24)                 result address
                                        1061+*                                      INSTRUCTION UNDER TEST ROUTINE
0000194C                                1062+X24     DS     0F
0000194C   E710 5038 0006      00001968 1063+        VL     V1,RE24                 get V1 source
00001952   E720 5048 0006      00001978 1064+        VL     V2,RE24+16              get V2 source
00001958   E601 20C0 0077               1065+        VCP    V1,V2,12                test instruction
0000195E   B98D 0020                    1066+        EPSW   R2,R0                   exptract psw
00001962   5020 8E98           00001098 1067+        ST     R2,CCPSW                   to save CC
00001966   07FB                         1068+        BR     R11                     return
00001968                                1069+RE24    DC     0F
00001968                                1070+        DROP   R5
00001968   00000990 00000000            1071         DC     XL16'00000990000000000001234500000000C'     V1 source
00001970   00123450 0000000C
00001978   00000990 00000000            1072         DC     XL16'00000990000000000002345000000000C'     V2 source
```

```
  LOC        OBJECT CODE      ADDR1     ADDR2     STMT

00001980  00023450 0000000C
                                                  1073
00001988  00000000                                1074           DC    F'0'      END OF TABLE
0000198C  00000000                                1075           DC    F'0'
                                                  1076 *
                                                  1077 * table of pointers to individual load test
                                                  1078 *
00001990                                          1079 E6TESTS  DS    0F
                                                  1080           PTTABLE
00001990                                          1081+TTABLE   DS    0F
00001990  00001148                                1082+         DC    A(T1)             address of test
00001994  000011A0                                1083+         DC    A(T2)             address of test
00001998  000011F8                                1084+         DC    A(T3)             address of test
0000199C  00001250                                1085+         DC    A(T4)             address of test
000019A0  000012A8                                1086+         DC    A(T5)             address of test
000019A4  00001300                                1087+         DC    A(T6)             address of test
000019A8  00001358                                1088+         DC    A(T7)             address of test
000019AC  000013B0                                1089+         DC    A(T8)             address of test
000019B0  00001408                                1090+         DC    A(T9)             address of test
000019B4  00001460                                1091+         DC    A(T10)            address of test
000019B8  000014B8                                1092+         DC    A(T11)            address of test
000019BC  00001510                                1093+         DC    A(T12)            address of test
000019C0  00001568                                1094+         DC    A(T13)            address of test
000019C4  000015C0                                1095+         DC    A(T14)            address of test
000019C8  00001618                                1096+         DC    A(T15)            address of test
000019CC  00001670                                1097+         DC    A(T16)            address of test
000019D0  000016C8                                1098+         DC    A(T17)            address of test
000019D4  00001720                                1099+         DC    A(T18)            address of test
000019D8  00001778                                1100+         DC    A(T19)            address of test
000019DC  000017D0                                1101+         DC    A(T20)            address of test
000019E0  00001828                                1102+         DC    A(T21)            address of test
000019E4  00001880                                1103+         DC    A(T22)            address of test
000019E8  000018D8                                1104+         DC    A(T23)            address of test
000019EC  00001930                                1105+         DC    A(T24)            address of test
                                                  1106+*
000019F0  00000000                                1107+         DC    A(0)              END OF TABLE
000019F4  00000000                                1108+         DC    A(0)
                                                  1109
000019F8  00000000                                1110           DC    F'0'      END OF TABLE
000019FC  00000000                                1111           DC    F'0'
```

```
  LOC        OBJECT CODE      ADDR1      ADDR2     STMT

                                                   1113 ***********************************************************************
                                                   1114 *          Register equates
                                                   1115 ***********************************************************************

                             00000000  00000001    1117 R0      EQU    0
                             00000001  00000001    1118 R1      EQU    1
                             00000002  00000001    1119 R2      EQU    2
                             00000003  00000001    1120 R3      EQU    3
                             00000004  00000001    1121 R4      EQU    4
                             00000005  00000001    1122 R5      EQU    5
                             00000006  00000001    1123 R6      EQU    6
                             00000007  00000001    1124 R7      EQU    7
                             00000008  00000001    1125 R8      EQU    8
                             00000009  00000001    1126 R9      EQU    9
                             0000000A  00000001    1127 R10     EQU    10
                             0000000B  00000001    1128 R11     EQU    11
                             0000000C  00000001    1129 R12     EQU    12
                             0000000D  00000001    1130 R13     EQU    13
                             0000000E  00000001    1131 R14     EQU    14
                             0000000F  00000001    1132 R15     EQU    15




                                                   1134 ***********************************************************************
                                                   1135 *          Register equates
                                                   1136 ***********************************************************************

                             00000000  00000001    1138 V0      EQU    0
                             00000001  00000001    1139 V1      EQU    1
                             00000002  00000001    1140 V2      EQU    2
                             00000003  00000001    1141 V3      EQU    3
                             00000004  00000001    1142 V4      EQU    4
                             00000005  00000001    1143 V5      EQU    5
                             00000006  00000001    1144 V6      EQU    6
                             00000007  00000001    1145 V7      EQU    7
                             00000008  00000001    1146 V8      EQU    8
                             00000009  00000001    1147 V9      EQU    9
                             0000000A  00000001    1148 V10     EQU    10
                             0000000B  00000001    1149 V11     EQU    11
                             0000000C  00000001    1150 V12     EQU    12
                             0000000D  00000001    1151 V13     EQU    13
                             0000000E  00000001    1152 V14     EQU    14
                             0000000F  00000001    1153 V15     EQU    15
                             00000010  00000001    1154 V16     EQU    16
                             00000011  00000001    1155 V17     EQU    17
                             00000012  00000001    1156 V18     EQU    18
                             00000013  00000001    1157 V19     EQU    19
                             00000014  00000001    1158 V20     EQU    20
                             00000015  00000001    1159 V21     EQU    21
```

```
  LOC        OBJECT CODE       ADDR1      ADDR2      STMT

                             00000016   00000001   1160 V22        EQU    22
                             00000017   00000001   1161 V23        EQU    23
                             00000018   00000001   1162 V24        EQU    24
                             00000019   00000001   1163 V25        EQU    25
                             0000001A   00000001   1164 V26        EQU    26
                             0000001B   00000001   1165 V27        EQU    27
                             0000001C   00000001   1166 V28        EQU    28
                             0000001D   00000001   1167 V29        EQU    29
                             0000001E   00000001   1168 V30        EQU    30
                             0000001F   00000001   1169 V31        EQU    31
                                                   1170
                                                   1171            END
```

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES											
BEGIN	I	00000200	2	90	56	87	88									
CC	U	00000008	1	361	156											
CCFOUND	X	000010A0	1	333	143	163										
CCMASK	U	00000009	1	362	123											
CCMSG	U	00000258	1	136	130											
CCPRTEXP	C	00001047	1	313	160											
CCPRTGOT	C	00001057	1	316	167											
CCPRTLINE	C	00001004	16	308	318	170										
CCPRTLNG	U	00000055	1	318	169											
CCPRTNAME	C	00001031	8	311	153											
CCPRTNUM	C	00001014	3	309	151											
CCPSW	F	00001098	4	332	140	489	514	539	564	589	614	640	665	690	715	740	765
					791	816	841	866	891	916	942	967	992	1017	1042	1067
CTLR0	F	0000040C	4	270	100	101	102	103								
DECNUM	C	00001085	16	328	148	150	157	159	164	166						
E6TADR	A	00000414	4	273	109											
E6TEST	4	00000000	28	356	118											
E6TESTS	F	00001990	4	1079	273											
EDIT	X	00001059	18	323	149	158	165									
ENDTEST	U	000002E4	1	188	114											
EOJ	I	000003F0	4	260	191											
EOJPSW	D	000003E0	8	258	260											
FAILCONT	U	000002D4	1	178	173											
FAILED	F	00001000	4	300	180	189										
FAILPSW	D	000003F8	8	262	264											
FAILTEST	I	00000408	4	264	192											
IMAGE	1	00000000	6656	0												
K	U	00000400	1	283	284	285	286									
K64	U	00010000	1	285												
M3	U	00000007	1	360												
MB	U	00100000	1	286												
MSG	I	00000328	4	224	207											
MSGCMD	C	00000372	9	250	237	238										
MSGMSG	C	0000037B	95	251	231	248	229									
MSGMVC	I	0000036C	6	248	235											
MSGOK	I	0000033E	2	233	230											
MSGRET	I	00000358	4	244	241											
MSGSAVE	F	00000360	4	247	227	244										
NEXTE6	U	0000022A	1	111	128	183										
OPNAME	C	0000000A	8	364	153											
PAGE	U	00001000	1	284												
PRT3	C	0000106F	18	326	149	150	151	158	159	160	165	166	167			
R0	U	00000000	1	1117	50	100	103	116	169	179	180	206	208	224	227	229	231
					233	244	488	513	538	563	588	613	639	664	689	714	739
					764	790	815	840	865	890	915	941	966	991	1016	1041	1066
R1	U	00000001	1	1118	123	124	125	140	141	142	143	170	189	190	238	248
R10	U	0000000A	1	1127	97	98										
R11	U	0000000B	1	1128	120	121	490	515	540	565	590	615	641	666	691	716	741
					766	792	817	842	867	892	917	943	968	993	1018	1043	1068
R12	U	0000000C	1	1129	109	112	127	182								
R13	U	0000000D	1	1130												
R14	U	0000000E	1	1131												
R15	U	0000000F	1	1132	171	201	211	212								
R1FUDGE	X	000010A8	8	339												
R10UTPUT	F	000010E0	8	343												
R2	U	00000002	1	1119	147	148	155	156	157	162	163	164	206	207	208	225	227

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
					233	234	235	237	244	245	488	489	513	514	538	539	563
					564	588	589	613	614	639	640	664	665	689	690	714	715
					739	740	764	765	790	791	815	816	840	841	865	866	890
					891	915	916	941	942	966	967	991	992	1016	1017	1041	1042
					1066	1067											
R3	U	00000003	1	1120													
R4	U	00000004	1	1121													
R5	U	00000005	1	1122	112	113	118	202	210	473	492	498	517	523	542	548	567
					573	592	598	617	624	643	649	668	674	693	699	718	724
					743	749	768	775	794	800	819	825	844	850	869	875	894
					900	919	926	945	951	970	976	995	1001	1020	1026	1045	1051
					1070												
R6	U	00000006	1	1123													
R7	U	00000007	1	1124													
R8	U	00000008	1	1125	87	90	91	92	94								
R9	U	00000009	1	1126	88	94	95	97									
RE1	F	00001180	4	491	482	485	486										
RE10	F	00001498	4	717	708	711	712										
RE11	F	000014F0	4	742	733	736	737										
RE12	F	00001548	4	767	758	761	762										
RE13	F	000015A0	4	793	784	787	788										
RE14	F	000015F8	4	818	809	812	813										
RE15	F	00001650	4	843	834	837	838										
RE16	F	000016A8	4	868	859	862	863										
RE17	F	00001700	4	893	884	887	888										
RE18	F	00001758	4	918	909	912	913										
RE19	F	000017B0	4	944	935	938	939										
RE2	F	000011D8	4	516	507	510	511										
RE20	F	00001808	4	969	960	963	964										
RE21	F	00001860	4	994	985	988	989										
RE22	F	000018B8	4	1019	1010	1013	1014										
RE23	F	00001910	4	1044	1035	1038	1039										
RE24	F	00001968	4	1069	1060	1063	1064										
RE3	F	00001230	4	541	532	535	536										
RE4	F	00001288	4	566	557	560	561										
RE5	F	000012E0	4	591	582	585	586										
RE6	F	00001338	4	616	607	610	611										
RE7	F	00001390	4	642	633	636	637										
RE8	F	000013E8	4	667	658	661	662										
RE9	F	00001440	4	692	683	686	687										
REA1	A	00001160	4	482													
REA10	A	00001478	4	708													
REA11	A	000014D0	4	733													
REA12	A	00001528	4	758													
REA13	A	00001580	4	784													
REA14	A	000015D8	4	809													
REA15	A	00001630	4	834													
REA16	A	00001688	4	859													
REA17	A	000016E0	4	884													
REA18	A	00001738	4	909													
REA19	A	00001790	4	935													
REA2	A	000011B8	4	507													
REA20	A	000017E8	4	960													
REA21	A	00001840	4	985													
REA22	A	00001898	4	1010													
REA23	A	000018F0	4	1035													

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES													
REA24	A	00001948	4	1060														
REA3	A	00001210	4	532														
REA4	A	00001268	4	557														
REA5	A	000012C0	4	582														
REA6	A	00001318	4	607														
REA7	A	00001370	4	633														
REA8	A	000013C8	4	658														
REA9	A	00001420	4	683														
READDR	A	00000018	4	367														
REG2LOW	U	000000DD	1	290														
REG2PATT	U	AABBCCDD	1	289														
RELEN	A	00000014	4	366														
RPTDWSAV	D	00000318	8	217	206	208												
RPTERROR	I	000002F2	4	201	171													
RPTSAVE	F	00000310	4	214	201	211												
RPTSVR5	F	00000314	4	215	202	210												
SVOLDPSW	U	00000140	0	52														
T1	A	00001148	4	474	1082													
T10	A	00001460	4	700	1091													
T11	A	000014B8	4	725	1092													
T12	A	00001510	4	750	1093													
T13	A	00001568	4	776	1094													
T14	A	000015C0	4	801	1095													
T15	A	00001618	4	826	1096													
T16	A	00001670	4	851	1097													
T17	A	000016C8	4	876	1098													
T18	A	00001720	4	901	1099													
T19	A	00001778	4	927	1100													
T2	A	000011A0	4	499	1083													
T20	A	000017D0	4	952	1101													
T21	A	00001828	4	977	1102													
T22	A	00001880	4	1002	1103													
T23	A	000018D8	4	1027	1104													
T24	A	00001930	4	1052	1105													
T3	A	000011F8	4	524	1084													
T4	A	00001250	4	549	1085													
T5	A	000012A8	4	574	1086													
T6	A	00001300	4	599	1087													
T7	A	00001358	4	625	1088													
T8	A	000013B0	4	650	1089													
T9	A	00001408	4	675	1090													
TESTCC	I	00000254	4	130	125													
TNUM	H	00000004	2	358	147													
TSUB	A	00000000	4	357	120													
TTABLE	F	00001990	4	1081														
V0	U	00000000	1	1138														
V1	U	00000001	1	1139	485	487	510	512	535	537	560	562	585	587	610	612	636	
					638	661	663	686	688	711	713	736	738	761	763	787	789	
					812	814	837	839	862	864	887	889	912	914	938	940	963	
					965	988	990	1013	1015	1038	1040	1063	1065					
V10	U	0000000A	1	1148														
V11	U	0000000B	1	1149														
V12	U	0000000C	1	1150														
V13	U	0000000D	1	1151														
V14	U	0000000E	1	1152														
V15	U	0000000F	1	1153														

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES												
V16	U	00000010	1	1154													
V17	U	00000011	1	1155													
V18	U	00000012	1	1156													
V19	U	00000013	1	1157													
V1FUDGE	X	000010F8	16	345													
V1FUDGEB	X	00001108	16	346													
V1INPUT	C	00001118	16	347													
V1OUTPUT	X	000010C0	16	341													
V2	U	00000002	1	1140	486	487	511	512	536	537	561	562	586	587	611	612	637
					638	662	663	687	688	712	713	737	738	762	763	788	789
					813	814	838	839	863	864	888	889	913	914	939	940	964
					965	989	990	1014	1015	1039	1040	1064	1065				
V20	U	00000014	1	1158													
V21	U	00000015	1	1159													
V22	U	00000016	1	1160													
V23	U	00000017	1	1161													
V24	U	00000018	1	1162													
V25	U	00000019	1	1163													
V26	U	0000001A	1	1164													
V27	U	0000001B	1	1165													
V28	U	0000001C	1	1166													
V29	U	0000001D	1	1167													
V3	U	00000003	1	1141													
V30	U	0000001E	1	1168													
V31	U	0000001F	1	1169													
V4	U	00000004	1	1142													
V5	U	00000005	1	1143													
V6	U	00000006	1	1144													
V7	U	00000007	1	1145													
V8	U	00000008	1	1146													
V9	U	00000009	1	1147													
X1	F	00001164	4	484	474												
X10	F	0000147C	4	710	700												
X11	F	000014D4	4	735	725												
X12	F	0000152C	4	760	750												
X13	F	00001584	4	786	776												
X14	F	000015DC	4	811	801												
X15	F	00001634	4	836	826												
X16	F	0000168C	4	861	851												
X17	F	000016E4	4	886	876												
X18	F	0000173C	4	911	901												
X19	F	00001794	4	937	927												
X2	F	000011BC	4	509	499												
X20	F	000017EC	4	962	952												
X21	F	00001844	4	987	977												
X22	F	0000189C	4	1012	1002												
X23	F	000018F4	4	1037	1027												
X24	F	0000194C	4	1062	1052												
X3	F	00001214	4	534	524												
X4	F	0000126C	4	559	549												
X5	F	000012C4	4	584	574												
X6	F	0000131C	4	609	599												
X7	F	00001374	4	635	625												
X8	F	000013CC	4	660	650												
X9	F	00001424	4	685	675												
ZVE6TST	J	00000000	6656	49	52	54	58	62	299	50							

SYMBOL	TYPE	VALUE	LENGTH	DEFN	REFERENCES
=AL2(L'MSGMSG)	R	00000422	2	279	229
=F'1'	F	0000041C	4	277	179
=H'0'	H	00000420	2	278	224
=XL4'3'	X	00000418	4	276	142

MACRO	DEFN	REFERENCES																
PTTABLE	431	1080																
VRR_H	381	471	496	521	546	571	596	622	647	672	697	722	747	773	798	823	848	873
		898	924	949	974	999	1024	1049										

```
    DESC      SYMBOL  SIZE      POS          ADDR

Entry: 0

Image       IMAGE    6656   0000-19FF    0000-19FF
   Region            6656   0000-19FF    0000-19FF
     CSECT   ZVE6TST  6656   0000-19FF    0000-19FF
```

     STMT   FILE NAME

1   /devstor/dev/tests/zvector-e6-15-comparedecimal.asm

** NO ERRORS FOUND **