

| LOC | OBJECT CODE | ADDR1 | ADDR2 | STMT  |
|-----|-------------|-------|-------|---|
|     |             |       |       | 2 *****   |
|     |             |       |       | 3 *   |
|     |             |       |       | 4 *     Zvector E7 instruction tests for VRI-c instruction:                     |
|     |             |       |       | 5 *   |
|     |             |       |       | 6 *     E74D VREP    - Vector Replicate   |
|     |             |       |       | 7 *   |
|     |             |       |       | 8 *             James Wekel February 2025                                       |
|     |             |       |       | 9 *****   |
|     |             |       |       |   |
|     |             |       |       | 11 *****  |
|     |             |       |       | 12 *  |
|     |             |       |       | 13 *             basic instruction tests  |
|     |             |       |       | 14 *  |
|     |             |       |       | 15 *****  |
|     |             |       |       | 16 *     This program tests proper functioning of the z/arch E7 VRI-c           |
|     |             |       |       | 17 *     Vector Replicate instruction.  |
|     |             |       |       | 18 *     Exceptions are not tested.   |
|     |             |       |       | 19 *  |
|     |             |       |       | 20 *     PLEASE NOTE that the tests are very SIMPLE TESTS designed to catch     |
|     |             |       |       | 21 *     obvious coding errors.   None of the tests are thorough.   They are    |
|     |             |       |       | 22 *     NOT designed to test all aspects of any of the instructions.           |
|     |             |       |       | 23 *  |
|     |             |       |       | 24 *****  |
|     |             |       |       | 25 *  |
|     |             |       |       | 26 *     *Testcase zvector-e7-22-VREP   |
|     |             |       |       | 27 *     *  |
|     |             |       |       | 28 *     *     Zvector E7 instruction tests for VRI-c instruction:              |
|     |             |       |       | 29 *     *  |
|     |             |       |       | 30 *     *     E74D VREP    - Vector Replicate                                  |
|     |             |       |       | 31 *     *  |
|     |             |       |       | 32 *     *     # -----  |
|     |             |       |       | 33 *     *     #     This tests only the basic function of the instruction.     |
|     |             |       |       | 34 *     *     #     Exceptions are NOT tested.                                 |
|     |             |       |       | 35 *     *     # -----  |
|     |             |       |       | 36 *     *  |
|     |             |       |       | 37 *     main size        2   |
|     |             |       |       | 38 *     numcpu         1   |
|     |             |       |       | 39 *     sysclear   |
|     |             |       |       | 40 *     archlvl        z/Arch  |
|     |             |       |       | 41 *     *  |
|     |             |       |       | 42 *     loadcore        "\$(testpath)/zvector-e7-22-VREP.core" 0x0             |
|     |             |       |       | 43 *     *  |
|     |             |       |       | 44 *     diag8cmd        enable     # (needed for messages to Hercules console) |
|     |             |       |       | 45 *     runtest         5  |
|     |             |       |       | 46 *     diag8cmd        disable    # (reset back to default)                   |
|     |             |       |       | 47 *     *  |
|     |             |       |       | 48 *     *Done  |
|     |             |       |       | 49 *     *  |
|     |             |       |       | 50 *****  |

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

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT |   |
|----------|-------------------|----------|----------|------|---|
|          |                   |          |          | 107  | *****   |
|          |                   |          |          | 108  | * Low core PSWs   |
|          |                   |          |          | 109  | *****   |
| 00000000 |                   | 00000000 | 00001AB7 | 110  | ZVE7TST START 0   |
|          |                   | 00000000 |          | 111  | USING ZVE7TST, R0 Low core addressability                   |
|          |                   | 00000140 | 00000000 | 112  |   |
|          |                   |          |          | 113  | SVOLDPSW EQU ZVE7TST+X' 140' z/Arch Supervisor call old PSW |
| 00000000 |                   | 00000000 | 000001A0 | 115  | ORG ZVE7TST+X' 1A0' z/Architecture RESTART PSW              |
| 000001A0 | 00000001 80000000 |          |          | 116  | DC X' 0000000180000000'                                     |
| 000001A8 | 00000000 00000200 |          |          | 117  | DC AD(BEGIN)  |
| 000001B0 |                   | 000001B0 | 000001D0 | 119  | ORG ZVE7TST+X' 1D0' z/Architecture PROGRAM CHECK PSW        |
| 000001D0 | 00020001 80000000 |          |          | 120  | DC X' 0002000180000000'                                     |
| 000001D8 | 00000000 0000DEAD |          |          | 121  | DC AD(X' DEAD')   |
| 000001E0 |                   | 000001E0 | 00000200 | 123  | ORG ZVE7TST+X' 200' Start of actual test program..          |
|          |                   |          |          | 125  | *****   |
|          |                   |          |          | 126  | * The actual "ZVE7TST" program itself...                    |
|          |                   |          |          | 127  | *****   |
|          |                   |          |          | 128  | *   |
|          |                   |          |          | 129  | * Architecture Mode: z/Arch                                 |
|          |                   |          |          | 130  | * Register Usage:   |
|          |                   |          |          | 131  | *   |
|          |                   |          |          | 132  | * R0 (work)   |
|          |                   |          |          | 133  | * R1-4 (work)   |
|          |                   |          |          | 134  | * R5 Testing control table - current test base              |
|          |                   |          |          | 135  | * R6- R7 (work)   |
|          |                   |          |          | 136  | * R8 First base register                                    |
|          |                   |          |          | 137  | * R9 Second base register                                   |
|          |                   |          |          | 138  | * R10 Third base register                                   |
|          |                   |          |          | 139  | * R11 E7TEST call return                                    |
|          |                   |          |          | 140  | * R12 E7TESTS register                                      |
|          |                   |          |          | 141  | * R13 (work)  |
|          |                   |          |          | 142  | * R14 Subroutine call                                       |
|          |                   |          |          | 143  | * R15 Secondary Subroutine call or work                     |
|          |                   |          |          | 144  | *   |
|          |                   |          |          | 145  | *****   |
| 00000200 |                   | 00000200 |          | 147  | USING BEGIN, R8 FIRST Base Register                         |
| 00000200 |                   | 00001200 |          | 148  | USING BEGIN+4096, R9 SECOND Base Register                   |
| 00000200 |                   | 00002200 |          | 149  | USING BEGIN+8192, R10 THIRD Base Register                   |
| 00000200 | 0580              |          |          | 151  | BEGIN BALR R8, 0 Inititalize FIRST base register            |
| 00000202 | 0680              |          |          | 152  | BCTR R8, 0 Inititalize FIRST base register                  |
| 00000204 | 0680              |          |          | 153  | BCTR R8, 0 Inititalize FIRST base register                  |
| 00000206 | 4190 8800         |          | 00000800 | 155  | LA R9, 2048(, R8) Inititalize SECOND base register          |
| 0000020A | 4190 9800         |          | 00000800 | 156  | LA R9, 2048(, R9) Inititalize SECOND base register          |
|          |                   |          |          | 157  |   |







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|----------|----------|-----------|----------|----------|------|----------|----------|--|
|          |          |           |          |          | 252  | *****    |          |  |
|          |          |           |          |          | 253  | *        | RPTERROR | Report instruction test in error                 |
|          |          |           |          |          | 254  | *****    |          |  |
| 00000326 | 50F0     | 81A4      |          | 000003A4 | 256  | RPTERROR | ST       | R15, RPTSAVE Save return address                 |
| 0000032A | 5050     | 81A8      |          | 000003A8 | 257  |          | ST       | R5, RPTSVR5 Save R5                              |
|          |          |           |          |          | 258  | *        |          |  |
| 0000032E | 4820     | 5004      |          | 00000004 | 259  |          | LH       | R2, TNUM get test number and convert             |
| 00000332 | 4E20     | 8E81      |          | 00001081 | 260  |          | CVD      | R2, DECNUM                                       |
| 00000336 | D211     | 8E6B 8E55 | 0000106B | 00001055 | 261  |          | MVC      | PRT3, EDIT                                       |
| 0000033C | DE11     | 8E6B 8E81 | 0000106B | 00001081 | 262  |          | ED       | PRT3, DECNUM                                     |
| 00000342 | D202     | 8E18 8E78 | 00001018 | 00001078 | 263  |          | MVC      | PRTNUM(3), PRT3+13 fill in message with test #   |
|          |          |           |          |          | 264  |          |          |  |
| 00000348 | D207     | 8E33 500A | 00001033 | 0000000A | 265  |          | MVC      | PRTNAME, OPNAME fill in message with instruction |
|          |          |           |          |          | 266  | *        |          |  |
| 0000034E | 4820     | 5008      |          | 00000008 | 267  |          | LH       | R2, I2 get i2 and convert                        |
| 00000352 | 4E20     | 8E81      |          | 00001081 | 268  |          | CVD      | R2, DECNUM                                       |
| 00000356 | D211     | 8E6B 8E55 | 0000106B | 00001055 | 269  |          | MVC      | PRT3, EDIT                                       |
| 0000035C | DE11     | 8E6B 8E81 | 0000106B | 00001081 | 270  |          | ED       | PRT3, DECNUM                                     |
| 00000362 | D204     | 8E44 8E76 | 00001044 | 00001076 | 271  |          | MVC      | PRTI2(5), PRT3+11 fill in message with i2 field  |
|          |          |           |          |          | 272  | *        |          |  |
| 00000368 | E320     | 5007 0076 |          | 00000007 | 273  |          | LB       | R2, M4 get m4 and convert                        |
| 0000036E | 4E20     | 8E81      |          | 00001081 | 274  |          | CVD      | R2, DECNUM                                       |
| 00000372 | D211     | 8E6B 8E55 | 0000106B | 00001055 | 275  |          | MVC      | PRT3, EDIT                                       |
| 00000378 | DE11     | 8E6B 8E81 | 0000106B | 00001081 | 276  |          | ED       | PRT3, DECNUM                                     |
| 0000037E | D201     | 8E52 8E79 | 00001052 | 00001079 | 277  |          | MVC      | PRTM4(2), PRT3+14 fill in message with m4 field  |
|          |          |           |          |          | 278  | *        |          |  |
|          |          |           |          |          | 279  | *        |          |  |
|          |          |           |          |          | 280  | *        |          |  |
| 00000384 | 9002     | 81B0      |          | 000003B0 | 281  |          | STM      | R0, R2, RPTDWSAV save regs used by MSG           |
| 00000388 | 4100     | 004D      |          | 0000004D | 282  |          | LA       | R0, PRTLNG message length                        |
| 0000038C | 4110     | 8E08      |          | 00001008 | 283  |          | LA       | R1, PRTLNE messagfe address                      |
| 00000390 | 4520     | 81C0      |          | 000003C0 | 284  |          | BAL      | R2, MSG call Hercules console MSG display        |
| 00000394 | 9802     | 81B0      |          | 000003B0 | 285  |          | LM       | R0, R2, RPTDWSAV restore regs                    |
|          |          |           |          |          |      |          |          |  |
| 00000398 | 5850     | 81A8      |          | 000003A8 | 287  |          | L        | R5, RPTSVR5 Restore R5                           |
| 0000039C | 58F0     | 81A4      |          | 000003A4 | 288  |          | L        | R15, RPTSAVE Restore return address              |
| 000003A0 | 07FF     |           |          |          | 289  |          | BR       | R15 Return to caller                             |
|          |          |           |          |          |      |          |          |  |
| 000003A4 | 00000000 |           |          |          | 291  | RPTSAVE  | DC       | F' 0' R15 save area                              |
| 000003A8 | 00000000 |           |          |          | 292  | RPTSVR5  | DC       | F' 0' R5 save area                               |
|          |          |           |          |          |      |          |          |  |
| 000003B0 | 00000000 | 00000000  |          |          | 294  | RPTDWSAV | DC       | 2D' 0' R0-R2 save area for MSG call              |













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|----------|-------------|----------|----------|------|--|
|          |             |          |          | 414  | *****  |
|          |             |          |          | 415  | *            E7TEST DSECT  |
|          |             |          |          | 416  | *****  |
|          |             |          |          | 418  | E7TEST    DSECT ,  |
| 00000000 | 00000000    |          |          | 419  | TSUB       DC    A(0)            pointer to test                           |
| 00000004 | 0000        |          |          | 420  | TNUM       DC    H' 00'           Test Number                              |
| 00000006 | 00          |          |          | 421  | DC    X' 00'   |
|          |             |          |          | 422  |  |
| 00000007 | 00          |          |          | 423  | M4          DC    HL1' 00'        m4 field                                 |
| 00000008 | 0000        |          |          | 424  | I2          DC    HL2' 00'        i2 used                                  |
|          |             |          |          | 425  |  |
| 0000000A | 40404040    | 40404040 |          | 426  | OPNAME     DC    CL8' '           E7 name                                  |
| 00000014 | 00000000    |          |          | 427  | V2ADDR     DC    A(0)           address of v2 source                       |
| 00000018 | 00000000    |          |          | 428  | V3ADDR     DC    A(0)           address of v3 source                       |
| 0000001C | 00000000    |          |          | 429  | RELEN       DC    A(0)           RESULT LENGTH                             |
| 00000020 | 00000000    |          |          | 430  | READDR     DC    A(0)           result (expected) address                  |
| 00000028 | 00000000    | 00000000 |          | 431  | DS    FD            gap  |
| 00000030 | 00000000    | 00000000 |          | 432  | V10OUTPUT   DS    XL16          V1 Output                                  |
| 00000040 | 00000000    | 00000000 |          | 433  | DS    FD            gap  |
|          |             |          |          | 434  |  |
|          |             |          |          | 435  | *            test routine will be here (from VRI-c macro)                  |
|          |             |          |          | 436  | *  |
|          |             |          |          | 437  | *            followed by   |
|          |             |          |          | 438  | *            EXPECTED RESULT   |
|          |             |          |          |      |  |
|          |             | 00000000 | 00001AB7 | 440  | ZVE7TST    CSECT ,   |
| 000010C4 |             |          |          | 441  | DS    0F   |
|          |             |          |          | 443  | *****  |
|          |             |          |          | 444  | *            Macros to help build test tables                              |
|          |             |          |          | 445  | *****  |
|          |             |          |          |      |  |
|          |             |          |          | 447  | *  |
|          |             |          |          | 448  | *            macros to generate individual test                            |
|          |             |          |          | 449  | *  |
|          |             |          |          | 450  | *            Hexidecimal version   |
|          |             |          |          | 451  | *            -----   |
|          |             |          |          | 452  | MACRO  |
|          |             |          |          | 453  | VRI_C &INST, &I2, &M4  |
|          |             |          |          | 454  | . *                                &INST    - VRI-c instruction under test |
|          |             |          |          | 455  | . *                                &i2       - i2 index                    |
|          |             |          |          | 456  | . *                                &m4       - m4 element size control     |
|          |             |          |          | 457  |  |
|          |             |          |          | 458  | GBLA    &TNUM  |
|          |             |          |          | 459  | &TNUM       SETA    &TNUM+1  |
|          |             |          |          | 460  |  |
|          |             |          |          | 461  | DS       0FD   |
|          |             |          |          | 462  | USING   *, R5            base for test data and test routine               |
|          |             |          |          | 463  |  |
|          |             |          |          | 464  | T&TNUM      DC       A(X&TNUM)           address of test routine           |

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|-----|-------------|-------|-------|------|---|------------------------|-------------------------------------|
|     |             |       |       | 465  | DC  | H' &TNUM               | test number                         |
|     |             |       |       | 466  | DC  | X' 00'                 |                                     |
|     |             |       |       | 467  | DC  | HL1' &M4'              | m3 field                            |
|     |             |       |       | 468  | DC  | HL2' &I2'              | i2 used                             |
|     |             |       |       | 469  | DC  | CL8' &INST'            | instruction name                    |
|     |             |       |       | 470  | DC  | A(RE&TNUM+16)          | address of v2 source                |
|     |             |       |       | 471  | DC  | A(RE&TNUM+32)          | address of v3 source                |
|     |             |       |       | 472  | DC  | A(16)                  | result length                       |
|     |             |       |       | 473  | REA&TNUM  | DC A(RE&TNUM)          | result address                      |
|     |             |       |       | 474  | DS  | FD                     | gap                                 |
|     |             |       |       | 475  | V10&TNUM  | DS XL16                | V1 output                           |
|     |             |       |       | 476  | DS  | FD                     | gap                                 |
|     |             |       |       | 477  | . *   |                        |                                     |
|     |             |       |       | 478  | *   |                        |                                     |
|     |             |       |       | 479  | X&TNUM  | DS 0F                  |                                     |
|     |             |       |       | 480  | VL  | V22, V1FUDGE           |                                     |
|     |             |       |       | 481  |   |                        |                                     |
|     |             |       |       | 482  | LGF   | R1, V2ADDR             | load v2 source                      |
|     |             |       |       | 483  | VL  | v23, 0(R1)             | use v23 to test decoder             |
|     |             |       |       | 484  |   |                        |                                     |
|     |             |       |       | 485  | &INST   | V22, v23, &I2, &M4     | test instruction (dest is a source) |
|     |             |       |       | 486  |   |                        |                                     |
|     |             |       |       | 487  | VST   | V22, V10&TNUM          | save v1 output                      |
|     |             |       |       | 488  | BR  | R11                    | return                              |
|     |             |       |       | 489  |   |                        |                                     |
|     |             |       |       | 490  | RE&TNUM   | DC 0F                  | xl16 expected result                |
|     |             |       |       | 491  |   |                        |                                     |
|     |             |       |       | 492  | DROP  | R5                     |                                     |
|     |             |       |       | 493  | MEND  |                        |                                     |
|     |             |       |       | 494  | *   |                        |                                     |
|     |             |       |       | 495  | * macro to generate table of pointers to individual tests |                        |                                     |
|     |             |       |       | 496  | *   |                        |                                     |
|     |             |       |       | 497  | MACRO   |                        |                                     |
|     |             |       |       | 498  | PTTABLE   |                        |                                     |
|     |             |       |       | 499  | GBLA  | &TNUM                  |                                     |
|     |             |       |       | 500  | LCLA  | &CUR                   |                                     |
|     |             |       |       | 501  | &CUR  | SETA 1                 |                                     |
|     |             |       |       | 502  | . *   |                        |                                     |
|     |             |       |       | 503  | TTABLE  | DS 0F                  |                                     |
|     |             |       |       | 504  | . LOOP  | ANOP                   |                                     |
|     |             |       |       | 505  | . *   |                        |                                     |
|     |             |       |       | 506  | DC  | A(T&CUR)               |                                     |
|     |             |       |       | 507  | . *   |                        |                                     |
|     |             |       |       | 508  | &CUR  | SETA &CUR+1            |                                     |
|     |             |       |       | 509  | AIF   | (&CUR LE &TNUM) . LOOP |                                     |
|     |             |       |       | 510  | *   |                        |                                     |
|     |             |       |       | 511  | DC  | A(0)                   | END OF TABLE                        |
|     |             |       |       | 512  | DC  | A(0)                   |                                     |
|     |             |       |       | 513  | . *   |                        |                                     |
|     |             |       |       | 514  | MEND  |                        |                                     |
|     |             |       |       | 515  |   |                        |                                     |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2 | STMT  |                                     |
|----------|-------------------|----------|-------|---|-------------------------------------|
|          |                   |          |       | 517 *****   |                                     |
|          |                   |          |       | 518 * E7 VRI-c tests                              |                                     |
|          |                   |          |       | 519 *****   |                                     |
|          |                   |          |       | 520 PRINT DATA                                    |                                     |
|          |                   |          |       | 521 *   |                                     |
|          |                   |          |       | 522 * E74D VREP - Vector Replicate                |                                     |
|          |                   |          |       | 523 *   |                                     |
|          |                   |          |       | 524 * VRI_C instruction, I2, M4                   |                                     |
|          |                   |          |       | 525 * followed by                                 |                                     |
|          |                   |          |       | 526 * 16 byte expected result (V1)                |                                     |
|          |                   |          |       | 527 * 16 byte V3 source (referenced as V2)        |                                     |
|          |                   |          |       | 528 *-----  |                                     |
|          |                   |          |       | 529 * VREP - Vector Replicate                     |                                     |
|          |                   |          |       | 530 *-----  |                                     |
|          |                   |          |       | 531 *Byte   |                                     |
|          |                   |          |       | 532 VRI_C VREP, 0, 0                              |                                     |
| 000010C8 |                   |          |       | 533+ DS OFD                                       |                                     |
| 000010C8 |                   | 000010C8 |       | 534+ USING *, R5                                  | base for test data and test routine |
| 000010C8 | 00001110          |          |       | 535+T1 DC A(X1)                                   | address of test routine             |
| 000010CC | 0001              |          |       | 536+ DC H' 1'                                     | test number                         |
| 000010CE | 00                |          |       | 537+ DC X' 00'                                    |                                     |
| 000010CF | 00                |          |       | 538+ DC HL1' 0'                                   | m3 field                            |
| 000010D0 | 0000              |          |       | 539+ DC HL2' 0'                                   | i2 used                             |
| 000010D2 | E5D9C5D7 40404040 |          |       | 540+ DC CL8' VREP'                                | instruction name                    |
| 000010DC | 00001140          |          |       | 541+ DC A(RE1+16)                                 | address of v2 source                |
| 000010E0 | 00001150          |          |       | 542+ DC A(RE1+32)                                 | address of v3 source                |
| 000010E4 | 00000010          |          |       | 543+ DC A(16)                                     | result length                       |
| 000010E8 | 00001130          |          |       | 544+REA1 DC A(RE1)                                | result address                      |
| 000010F0 | 00000000 00000000 |          |       | 545+ DS FD  | gap                                 |
| 000010F8 | 00000000 00000000 |          |       | 546+V101 DS XL16                                  | V1 output                           |
| 00001100 | 00000000 00000000 |          |       |   |                                     |
| 00001108 | 00000000 00000000 |          |       | 547+ DS FD  | gap                                 |
|          |                   |          |       | 548+*   |                                     |
| 00001110 |                   |          |       | 549+X1 DS OF                                      |                                     |
| 00001110 | E760 8EA4 0806    | 000010A4 |       | 550+ VL V22, V1FUDGE                              |                                     |
| 00001116 | E310 5014 0014    | 00000014 |       | 551+ LGF R1, V2ADDR                               | load v2 source                      |
| 0000111C | E771 0000 0806    | 00000000 |       | 552+ VL v23, 0(R1)                                | use v23 to test decoder             |
| 00001122 | E767 0000 0C4D    |          |       | 553+ VREP V22, v23, 0, 0                          | test instruction (dest is a source) |
| 00001128 | E760 5030 080E    | 000010F8 |       | 554+ VST V22, V101                                | save v1 output                      |
| 0000112E | 07FB              |          |       | 555+ BR R11                                       | return                              |
| 00001130 |                   |          |       | 556+RE1 DC OF                                     | xl16 expected result                |
| 00001130 |                   |          |       | 557+ DROP R5                                      |                                     |
| 00001130 | 00000000 00000000 |          |       | 558 DC XL16' 00000000 00000000 00000000 00000000' | result t                            |
| 00001138 | 00000000 00000000 |          |       |   |                                     |
| 00001140 | 00010101 01010101 |          |       | 559 DC XL16' 00010101 01010101 01010101 01010101' | v3                                  |
| 00001148 | 01010101 01010101 |          |       |   |                                     |
|          |                   |          |       | 560   |                                     |
|          |                   |          |       | 561 VRI_C VREP, 1, 0                              |                                     |
| 00001150 |                   |          |       | 562+ DS OFD                                       |                                     |
| 00001150 |                   | 00001150 |       | 563+ USING *, R5                                  | base for test data and test routine |
| 00001150 | 00001198          |          |       | 564+T2 DC A(X2)                                   | address of test routine             |
| 00001154 | 0002              |          |       | 565+ DC H' 2'                                     | test number                         |
| 00001156 | 00                |          |       | 566+ DC X' 00'                                    |                                     |
| 00001157 | 00                |          |       | 567+ DC HL1' 0'                                   | m3 field                            |
| 00001158 | 0001              |          |       | 568+ DC HL2' 1'                                   | i2 used                             |
| 0000115A | E5D9C5D7 40404040 |          |       | 569+ DC CL8' VREP'                                | instruction name                    |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT     |       |  |                                     |
|----------|-------------------|----------|----------|----------|-------|--|-------------------------------------|
| 00001164 | 000011C8          |          |          | 570+     | DC    | A(RE2+16)                                  | address of v2 source                |
| 00001168 | 000011D8          |          |          | 571+     | DC    | A(RE2+32)                                  | address of v3 source                |
| 0000116C | 00000010          |          |          | 572+     | DC    | A(16)                                      | result length                       |
| 00001170 | 000011B8          |          |          | 573+REA2 | DC    | A(RE2)                                     | result address                      |
| 00001178 | 00000000 00000000 |          |          | 574+     | DS    | FD   | gap                                 |
| 00001180 | 00000000 00000000 |          |          | 575+V102 | DS    | XL16                                       | V1 output                           |
| 00001188 | 00000000 00000000 |          |          |          |       |  |                                     |
| 00001190 | 00000000 00000000 |          |          | 576+     | DS    | FD   | gap                                 |
|          |                   |          |          | 577+*    |       |  |                                     |
| 00001198 |                   |          |          | 578+X2   | DS    | 0F   |                                     |
| 00001198 | E760 8EA4 0806    |          | 000010A4 | 579+     | VL    | V22, V1FUDGE                               |                                     |
| 0000119E | E310 5014 0014    |          | 00000014 | 580+     | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 000011A4 | E771 0000 0806    |          | 00000000 | 581+     | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 000011AA | E767 0001 0C4D    |          |          | 582+     | VREP  | V22, v23, 1, 0                             | test instruction (dest is a source) |
| 000011B0 | E760 5030 080E    |          | 00001180 | 583+     | VST   | V22, V102                                  | save v1 output                      |
| 000011B6 | 07FB              |          |          | 584+     | BR    | R11  | return                              |
| 000011B8 |                   |          |          | 585+RE2  | DC    | 0F   | xl16 expected result                |
| 000011B8 |                   |          |          | 586+     | DROP  | R5   |                                     |
| 000011B8 | 01010101 01010101 |          |          | 587      | DC    | XL16' 01010101 01010101 01010101 01010101' | result t                            |
| 000011C0 | 01010101 01010101 |          |          |          |       |  |                                     |
| 000011C8 | 00010101 01010101 |          |          | 588      | DC    | XL16' 00010101 01010101 01010101 01010101' | v3                                  |
| 000011D0 | 01010101 01010101 |          |          |          |       |  |                                     |
|          |                   |          |          | 589      |       |  |                                     |
| 000011D8 |                   |          |          | 590      | VRI_C | VREP, 2, 0                                 |                                     |
| 000011D8 |                   | 000011D8 |          | 591+     | DS    | 0FD  |                                     |
| 000011D8 | 00001220          |          |          | 592+     | USING | *, R5                                      | base for test data and test routine |
| 000011DC | 0003              |          |          | 593+T3   | DC    | A(X3)                                      | address of test routine             |
| 000011DE | 00                |          |          | 594+     | DC    | H' 3'                                      | test number                         |
| 000011DF | 00                |          |          | 595+     | DC    | X' 00'                                     |                                     |
| 000011E0 | 0002              |          |          | 596+     | DC    | HL1' 0'                                    | m3 field                            |
| 000011E2 | E5D9C5D7 40404040 |          |          | 597+     | DC    | HL2' 2'                                    | i2 used                             |
| 000011EC | 00001250          |          |          | 598+     | DC    | CL8' VREP'                                 | instruction name                    |
| 000011F0 | 00001260          |          |          | 599+     | DC    | A(RE3+16)                                  | address of v2 source                |
| 000011F4 | 00000010          |          |          | 600+     | DC    | A(RE3+32)                                  | address of v3 source                |
| 000011F8 | 00001240          |          |          | 601+     | DC    | A(16)                                      | result length                       |
| 00001200 | 00000000 00000000 |          |          | 602+REA3 | DC    | A(RE3)                                     | result address                      |
| 00001208 | 00000000 00000000 |          |          | 603+     | DS    | FD   | gap                                 |
| 00001210 | 00000000 00000000 |          |          | 604+V103 | DS    | XL16                                       | V1 output                           |
| 00001218 | 00000000 00000000 |          |          |          |       |  |                                     |
|          |                   |          |          | 605+     | DS    | FD   | gap                                 |
|          |                   |          |          | 606+*    |       |  |                                     |
| 00001220 |                   |          |          | 607+X3   | DS    | 0F   |                                     |
| 00001220 | E760 8EA4 0806    |          | 000010A4 | 608+     | VL    | V22, V1FUDGE                               |                                     |
| 00001226 | E310 5014 0014    |          | 00000014 | 609+     | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 0000122C | E771 0000 0806    |          | 00000000 | 610+     | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 00001232 | E767 0002 0C4D    |          |          | 611+     | VREP  | V22, v23, 2, 0                             | test instruction (dest is a source) |
| 00001238 | E760 9008 080E    |          | 00001208 | 612+     | VST   | V22, V103                                  | save v1 output                      |
| 0000123E | 07FB              |          |          | 613+     | BR    | R11  | return                              |
| 00001240 |                   |          |          | 614+RE3  | DC    | 0F   | xl16 expected result                |
| 00001240 |                   |          |          | 615+     | DROP  | R5   |                                     |
| 00001240 | 02020202 02020202 |          |          | 616      | DC    | XL16' 02020202 02020202 02020202 02020202' | result t                            |
| 00001248 | 02020202 02020202 |          |          |          |       |  |                                     |
| 00001250 | 01010201 01010101 |          |          | 617      | DC    | XL16' 01010201 01010101 01010101 01010101' | v3                                  |
| 00001258 | 01010101 01010101 |          |          |          |       |  |                                     |
|          |                   |          |          | 618      |       |  |                                     |
|          |                   |          |          | 619      | VRI_C | VREP, 7, 0                                 |                                     |



| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT     |       |   |
|----------|-------------------|----------|----------|----------|-------|---|
| 00001260 |                   |          |          | 620+     | DS    | OFD   |
| 00001260 |                   | 00001260 |          | 621+     | USING | *, R5   |
| 00001260 | 000012A8          |          |          | 622+T4   | DC    | A(X4)   |
| 00001264 | 0004              |          |          | 623+     | DC    | H' 4'   |
| 00001266 | 00                |          |          | 624+     | DC    | X' 00'  |
| 00001267 | 00                |          |          | 625+     | DC    | HL1' 0'   |
| 00001268 | 0007              |          |          | 626+     | DC    | HL2' 7'   |
| 0000126A | E5D9C5D7 40404040 |          |          | 627+     | DC    | CL8' VREP'  |
| 00001274 | 000012D8          |          |          | 628+     | DC    | A(RE4+16)   |
| 00001278 | 000012E8          |          |          | 629+     | DC    | A(RE4+32)   |
| 0000127C | 00000010          |          |          | 630+     | DC    | A(16)   |
| 00001280 | 000012C8          |          |          | 631+REA4 | DC    | A(RE4)  |
| 00001288 | 00000000 00000000 |          |          | 632+     | DS    | FD  |
| 00001290 | 00000000 00000000 |          |          | 633+V104 | DS    | XL16  |
| 00001298 | 00000000 00000000 |          |          |          |       |   |
| 000012A0 | 00000000 00000000 |          |          | 634+     | DS    | FD  |
|          |                   |          |          | 635+*    |       | gap   |
| 000012A8 |                   |          |          | 636+X4   | DS    | OF  |
| 000012A8 | E760 8EA4 0806    |          | 000010A4 | 637+     | VL    | V22, V1FUDGE                                      |
| 000012AE | E310 5014 0014    |          | 00000014 | 638+     | LGF   | R1, V2ADDR  |
| 000012B4 | E771 0000 0806    |          | 00000000 | 639+     | VL    | v23, 0(R1)  |
| 000012BA | E767 0007 0C4D    |          |          | 640+     | VREP  | V22, v23, 7, 0                                    |
| 000012C0 | E760 5030 080E    |          | 00001290 | 641+     | VST   | V22, V104   |
| 000012C6 | 07FB              |          |          | 642+     | BR    | R11   |
| 000012C8 |                   |          |          | 643+RE4  | DC    | OF  |
| 000012C8 |                   |          |          | 644+     | DROP  | R5  |
| 000012C8 | F0F0F0F0 F0F0F0F0 |          |          | 645      | DC    | XL16' F0F0F0F0 F0F0F0F0 F0F0F0F0 F0F0F0F0' result |
| 000012D0 | F0F0F0F0 F0F0F0F0 |          |          |          |       |   |
| 000012D8 | 01010201 010101F0 |          |          | 646      | DC    | XL16' 01010201 010101F0 01010101 01010101' v3     |
| 000012E0 | 01010101 01010101 |          |          |          |       |   |
|          |                   |          |          | 647      |       |   |
|          |                   |          |          | 648      | VRI_C | VREP, 15, 0                                       |
| 000012E8 |                   |          |          | 649+     | DS    | OFD   |
| 000012E8 |                   | 000012E8 |          | 650+     | USING | *, R5   |
| 000012E8 | 00001330          |          |          | 651+T5   | DC    | A(X5)   |
| 000012EC | 0005              |          |          | 652+     | DC    | H' 5'   |
| 000012EE | 00                |          |          | 653+     | DC    | X' 00'  |
| 000012EF | 00                |          |          | 654+     | DC    | HL1' 0'   |
| 000012F0 | 000F              |          |          | 655+     | DC    | HL2' 15'  |
| 000012F2 | E5D9C5D7 40404040 |          |          | 656+     | DC    | CL8' VREP'  |
| 000012FC | 00001360          |          |          | 657+     | DC    | A(RE5+16)   |
| 00001300 | 00001370          |          |          | 658+     | DC    | A(RE5+32)   |
| 00001304 | 00000010          |          |          | 659+     | DC    | A(16)   |
| 00001308 | 00001350          |          |          | 660+REA5 | DC    | A(RE5)  |
| 00001310 | 00000000 00000000 |          |          | 661+     | DS    | FD  |
| 00001318 | 00000000 00000000 |          |          | 662+V105 | DS    | XL16  |
| 00001320 | 00000000 00000000 |          |          |          |       |   |
| 00001328 | 00000000 00000000 |          |          | 663+     | DS    | FD  |
|          |                   |          |          | 664+*    |       | gap   |
| 00001330 |                   |          |          | 665+X5   | DS    | OF  |
| 00001330 | E760 8EA4 0806    |          | 000010A4 | 666+     | VL    | V22, V1FUDGE                                      |
| 00001336 | E310 5014 0014    |          | 00000014 | 667+     | LGF   | R1, V2ADDR  |
| 0000133C | E771 0000 0806    |          | 00000000 | 668+     | VL    | v23, 0(R1)  |
| 00001342 | E767 000F 0C4D    |          |          | 669+     | VREP  | V22, v23, 15, 0                                   |
| 00001348 | E760 5030 080E    |          | 00001318 | 670+     | VST   | V22, V105   |
| 0000134E | 07FB              |          |          | 671+     | BR    | R11   |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT          |       |  |                                     |
|----------|-------------------|----------|----------|---------------|-------|--|-------------------------------------|
| 00001350 |                   |          |          | 672+RE5       | DC    | 0F   | xl16 expected result                |
| 00001350 |                   |          |          | 673+          | DROP  | R5   |                                     |
| 00001350 | F0F0F0F0 F0F0F0F0 |          |          | 674           | DC    | XL16' F0F0F0F0 F0F0F0F0 F0F0F0F0 F0F0F0F0' | result                              |
| 00001358 | F0F0F0F0 F0F0F0F0 |          |          |               |       |  |                                     |
| 00001360 | 01010201 01010102 |          |          | 675           | DC    | XL16' 01010201 01010102 01010101 010101F0' | v3                                  |
| 00001368 | 01010101 010101F0 |          |          |               |       |  |                                     |
|          |                   |          |          | 676           |       |  |                                     |
|          |                   |          |          | 677 *Halfword |       |  |                                     |
|          |                   |          |          | 678           | VRI_C | VREP, 0, 1                                 |                                     |
| 00001370 |                   |          |          | 679+          | DS    | 0FD  |                                     |
| 00001370 |                   | 00001370 |          | 680+          | USING | *, R5                                      | base for test data and test routine |
| 00001370 | 000013B8          |          |          | 681+T6        | DC    | A(X6)                                      | address of test routine             |
| 00001374 | 0006              |          |          | 682+          | DC    | H' 6'                                      | test number                         |
| 00001376 | 00                |          |          | 683+          | DC    | X' 00'                                     |                                     |
| 00001377 | 01                |          |          | 684+          | DC    | HL1' 1'                                    | m3 field                            |
| 00001378 | 0000              |          |          | 685+          | DC    | HL2' 0'                                    | i2 used                             |
| 0000137A | E5D9C5D7 40404040 |          |          | 686+          | DC    | CL8' VREP'                                 | instruction name                    |
| 00001384 | 000013E8          |          |          | 687+          | DC    | A(RE6+16)                                  | address of v2 source                |
| 00001388 | 000013F8          |          |          | 688+          | DC    | A(RE6+32)                                  | address of v3 source                |
| 0000138C | 00000010          |          |          | 689+          | DC    | A(16)                                      | result length                       |
| 00001390 | 000013D8          |          |          | 690+REA6      | DC    | A(RE6)                                     | result address                      |
| 00001398 | 00000000 00000000 |          |          | 691+          | DS    | FD   | gap                                 |
| 000013A0 | 00000000 00000000 |          |          | 692+V106      | DS    | XL16                                       | V1 output                           |
| 000013A8 | 00000000 00000000 |          |          |               |       |  |                                     |
| 000013B0 | 00000000 00000000 |          |          | 693+          | DS    | FD   | gap                                 |
|          |                   |          |          | 694+*         |       |  |                                     |
| 000013B8 |                   |          |          | 695+X6        | DS    | 0F   |                                     |
| 000013B8 | E760 8EA4 0806    |          | 000010A4 | 696+          | VL    | V22, V1FUDGE                               |                                     |
| 000013BE | E310 5014 0014    |          | 00000014 | 697+          | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 000013C4 | E771 0000 0806    |          | 00000000 | 698+          | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 000013CA | E767 0000 1C4D    |          |          | 699+          | VREP  | V22, v23, 0, 1                             | test instruction (dest is a source) |
| 000013D0 | E760 5030 080E    |          | 000013A0 | 700+          | VST   | V22, V106                                  | save v1 output                      |
| 000013D6 | 07FB              |          |          | 701+          | BR    | R11  | return                              |
| 000013D8 |                   |          |          | 702+RE6       | DC    | 0F   | xl16 expected result                |
| 000013D8 |                   |          |          | 703+          | DROP  | R5   |                                     |
| 000013D8 | 00000000 00000000 |          |          | 704           | DC    | XL16' 00000000 00000000 00000000 00000000' | result                              |
| 000013E0 | 00000000 00000000 |          |          |               |       |  |                                     |
| 000013E8 | 00000101 01010101 |          |          | 705           | DC    | XL16' 00000101 01010101 01010101 01010101' | v3                                  |
| 000013F0 | 01010101 01010101 |          |          |               |       |  |                                     |
|          |                   |          |          | 706           |       |  |                                     |
|          |                   |          |          | 707           | VRI_C | VREP, 1, 1                                 |                                     |
| 000013F8 |                   |          |          | 708+          | DS    | 0FD  |                                     |
| 000013F8 |                   | 000013F8 |          | 709+          | USING | *, R5                                      | base for test data and test routine |
| 000013F8 | 00001440          |          |          | 710+T7        | DC    | A(X7)                                      | address of test routine             |
| 000013FC | 0007              |          |          | 711+          | DC    | H' 7'                                      | test number                         |
| 000013FE | 00                |          |          | 712+          | DC    | X' 00'                                     |                                     |
| 000013FF | 01                |          |          | 713+          | DC    | HL1' 1'                                    | m3 field                            |
| 00001400 | 0001              |          |          | 714+          | DC    | HL2' 1'                                    | i2 used                             |
| 00001402 | E5D9C5D7 40404040 |          |          | 715+          | DC    | CL8' VREP'                                 | instruction name                    |
| 0000140C | 00001470          |          |          | 716+          | DC    | A(RE7+16)                                  | address of v2 source                |
| 00001410 | 00001480          |          |          | 717+          | DC    | A(RE7+32)                                  | address of v3 source                |
| 00001414 | 00000010          |          |          | 718+          | DC    | A(16)                                      | result length                       |
| 00001418 | 00001460          |          |          | 719+REA7      | DC    | A(RE7)                                     | result address                      |
| 00001420 | 00000000 00000000 |          |          | 720+          | DS    | FD   | gap                                 |
| 00001428 | 00000000 00000000 |          |          | 721+V107      | DS    | XL16                                       | V1 output                           |
| 00001430 | 00000000 00000000 |          |          |               |       |  |                                     |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT          |       |  |                                     |
|----------|-------------------|----------|----------|---------------|-------|--|-------------------------------------|
| 00001438 | 00000000 00000000 |          |          | 722+<br>723+* | DS    | FD   | gap                                 |
| 00001440 |                   |          |          | 724+X7        | DS    | OF   |                                     |
| 00001440 | E760 8EA4 0806    |          | 000010A4 | 725+          | VL    | V22, V1FUDGE                               |                                     |
| 00001446 | E310 5014 0014    |          | 00000014 | 726+          | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 0000144C | E771 0000 0806    |          | 00000000 | 727+          | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 00001452 | E767 0001 1C4D    |          |          | 728+          | VREP  | V22, v23, 1, 1                             | test instruction (dest is a source) |
| 00001458 | E760 5030 080E    |          | 00001428 | 729+          | VST   | V22, V107                                  | save v1 output                      |
| 0000145E | 07FB              |          |          | 730+          | BR    | R11  | return                              |
| 00001460 |                   |          |          | 731+RE7       | DC    | OF   | xl16 expected result                |
| 00001460 |                   |          |          | 732+          | DROP  | R5   |                                     |
| 00001460 | B109B109 B109B109 |          |          | 733           | DC    | XL16' B109B109 B109B109 B109B109 B109B109' | result t                            |
| 00001468 | B109B109 B109B109 |          |          |               |       |  |                                     |
| 00001470 | 0001B109 01010101 |          |          | 734           | DC    | XL16' 0001B109 01010101 01010101 01010101' | v3                                  |
| 00001478 | 01010101 01010101 |          |          |               |       |  |                                     |
|          |                   |          |          | 735           |       |  |                                     |
|          |                   |          |          | 736           | VRI_C | VREP, 2, 1                                 |                                     |
| 00001480 |                   |          |          | 737+          | DS    | OFD  |                                     |
| 00001480 |                   | 00001480 |          | 738+          | USING | *, R5                                      | base for test data and test routine |
| 00001480 | 000014C8          |          |          | 739+T8        | DC    | A(X8)                                      | address of test routine             |
| 00001484 | 0008              |          |          | 740+          | DC    | H' 8'                                      | test number                         |
| 00001486 | 00                |          |          | 741+          | DC    | X' 00'                                     |                                     |
| 00001487 | 01                |          |          | 742+          | DC    | HL1' 1'                                    | m3 field                            |
| 00001488 | 0002              |          |          | 743+          | DC    | HL2' 2'                                    | i2 used                             |
| 0000148A | E5D9C5D7 40404040 |          |          | 744+          | DC    | CL8' VREP'                                 | instruction name                    |
| 00001494 | 000014F8          |          |          | 745+          | DC    | A(RE8+16)                                  | address of v2 source                |
| 00001498 | 00001508          |          |          | 746+          | DC    | A(RE8+32)                                  | address of v3 source                |
| 0000149C | 00000010          |          |          | 747+          | DC    | A(16)                                      | result length                       |
| 000014A0 | 000014E8          |          |          | 748+REA8      | DC    | A(RE8)                                     | result address                      |
| 000014A8 | 00000000 00000000 |          |          | 749+          | DS    | FD   | gap                                 |
| 000014B0 | 00000000 00000000 |          |          | 750+V108      | DS    | XL16                                       | V1 output                           |
| 000014B8 | 00000000 00000000 |          |          |               |       |  |                                     |
| 000014C0 | 00000000 00000000 |          |          | 751+          | DS    | FD   | gap                                 |
|          |                   |          |          | 752+*         |       |  |                                     |
| 000014C8 |                   |          |          | 753+X8        | DS    | OF   |                                     |
| 000014C8 | E760 8EA4 0806    |          | 000010A4 | 754+          | VL    | V22, V1FUDGE                               |                                     |
| 000014CE | E310 5014 0014    |          | 00000014 | 755+          | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 000014D4 | E771 0000 0806    |          | 00000000 | 756+          | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 000014DA | E767 0002 1C4D    |          |          | 757+          | VREP  | V22, v23, 2, 1                             | test instruction (dest is a source) |
| 000014E0 | E760 5030 080E    |          | 000014B0 | 758+          | VST   | V22, V108                                  | save v1 output                      |
| 000014E6 | 07FB              |          |          | 759+          | BR    | R11  | return                              |
| 000014E8 |                   |          |          | 760+RE8       | DC    | OF   | xl16 expected result                |
| 000014E8 |                   |          |          | 761+          | DROP  | R5   |                                     |
| 000014E8 | 07770777 07770777 |          |          | 762           | DC    | XL16' 07770777 07770777 07770777 07770777' | result t                            |
| 000014F0 | 07770777 07770777 |          |          |               |       |  |                                     |
| 000014F8 | 01010201 07770101 |          |          | 763           | DC    | XL16' 01010201 07770101 01010101 01010101' | v3                                  |
| 00001500 | 01010101 01010101 |          |          |               |       |  |                                     |
|          |                   |          |          | 764           |       |  |                                     |
|          |                   |          |          | 765           | VRI_C | VREP, 4, 1                                 |                                     |
| 00001508 |                   |          |          | 766+          | DS    | OFD  |                                     |
| 00001508 |                   | 00001508 |          | 767+          | USING | *, R5                                      | base for test data and test routine |
| 00001508 | 00001550          |          |          | 768+T9        | DC    | A(X9)                                      | address of test routine             |
| 0000150C | 0009              |          |          | 769+          | DC    | H' 9'                                      | test number                         |
| 0000150E | 00                |          |          | 770+          | DC    | X' 00'                                     |                                     |
| 0000150F | 01                |          |          | 771+          | DC    | HL1' 1'                                    | m3 field                            |
| 00001510 | 0004              |          |          | 772+          | DC    | HL2' 4'                                    | i2 used                             |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT      |       |  |                                     |
|----------|-------------------|----------|----------|-----------|-------|--|-------------------------------------|
| 00001512 | E5D9C5D7 40404040 |          |          | 773+      | DC    | CL8' VREP'                                 | instruction name                    |
| 0000151C | 00001580          |          |          | 774+      | DC    | A(RE9+16)                                  | address of v2 source                |
| 00001520 | 00001590          |          |          | 775+      | DC    | A(RE9+32)                                  | address of v3 source                |
| 00001524 | 00000010          |          |          | 776+      | DC    | A(16)                                      | result length                       |
| 00001528 | 00001570          |          |          | 777+REA9  | DC    | A(RE9)                                     | result address                      |
| 00001530 | 00000000 00000000 |          |          | 778+      | DS    | FD   | gap                                 |
| 00001538 | 00000000 00000000 |          |          | 779+V109  | DS    | XL16                                       | V1 output                           |
| 00001540 | 00000000 00000000 |          |          |           |       |  |                                     |
| 00001548 | 00000000 00000000 |          |          | 780+      | DS    | FD   | gap                                 |
|          |                   |          |          | 781+*     |       |  |                                     |
| 00001550 |                   |          |          | 782+X9    | DS    | 0F   |                                     |
| 00001550 | E760 8EA4 0806    |          | 000010A4 | 783+      | VL    | V22, V1FUDGE                               |                                     |
| 00001556 | E310 5014 0014    |          | 00000014 | 784+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 0000155C | E771 0000 0806    |          | 00000000 | 785+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 00001562 | E767 0004 1C4D    |          |          | 786+      | VREP  | V22, v23, 4, 1                             | test instruction (dest is a source) |
| 00001568 | E760 5030 080E    |          | 00001538 | 787+      | VST   | V22, V109                                  | save v1 output                      |
| 0000156E | 07FB              |          |          | 788+      | BR    | R11  | return                              |
| 00001570 |                   |          |          | 789+RE9   | DC    | 0F   | xl16 expected result                |
| 00001570 |                   |          |          | 790+      | DROP  | R5   |                                     |
| 00001570 | FFA1FFA1 FFA1FFA1 |          |          | 791       | DC    | XL16' FFA1FFA1 FFA1FFA1 FFA1FFA1 FFA1FFA1' | result t                            |
| 00001578 | FFA1FFA1 FFA1FFA1 |          |          |           |       |  |                                     |
| 00001580 | 01010201 07770101 |          |          | 792       | DC    | XL16' 01010201 07770101 FFA10101 01010101' | v3                                  |
| 00001588 | FFA10101 01010101 |          |          |           |       |  |                                     |
|          |                   |          |          | 793       |       |  |                                     |
|          |                   |          |          | 794       | VRI_C | VREP, 7, 1                                 |                                     |
| 00001590 |                   |          |          | 795+      | DS    | 0FD  |                                     |
| 00001590 |                   | 00001590 |          | 796+      | USING | *, R5                                      | base for test data and test routine |
| 00001590 | 000015D8          |          |          | 797+T10   | DC    | A(X10)                                     | address of test routine             |
| 00001594 | 000A              |          |          | 798+      | DC    | H' 10'                                     | test number                         |
| 00001596 | 00                |          |          | 799+      | DC    | X' 00'                                     |                                     |
| 00001597 | 01                |          |          | 800+      | DC    | HL1' 1'                                    | m3 field                            |
| 00001598 | 0007              |          |          | 801+      | DC    | HL2' 7'                                    | i2 used                             |
| 0000159A | E5D9C5D7 40404040 |          |          | 802+      | DC    | CL8' VREP'                                 | instruction name                    |
| 000015A4 | 00001608          |          |          | 803+      | DC    | A(RE10+16)                                 | address of v2 source                |
| 000015A8 | 00001618          |          |          | 804+      | DC    | A(RE10+32)                                 | address of v3 source                |
| 000015AC | 00000010          |          |          | 805+      | DC    | A(16)                                      | result length                       |
| 000015B0 | 000015F8          |          |          | 806+REA10 | DC    | A(RE10)                                    | result address                      |
| 000015B8 | 00000000 00000000 |          |          | 807+      | DS    | FD   | gap                                 |
| 000015C0 | 00000000 00000000 |          |          | 808+V1010 | DS    | XL16                                       | V1 output                           |
| 000015C8 | 00000000 00000000 |          |          |           |       |  |                                     |
| 000015D0 | 00000000 00000000 |          |          | 809+      | DS    | FD   | gap                                 |
|          |                   |          |          | 810+*     |       |  |                                     |
| 000015D8 |                   |          |          | 811+X10   | DS    | 0F   |                                     |
| 000015D8 | E760 8EA4 0806    |          | 000010A4 | 812+      | VL    | V22, V1FUDGE                               |                                     |
| 000015DE | E310 5014 0014    |          | 00000014 | 813+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 000015E4 | E771 0000 0806    |          | 00000000 | 814+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 000015EA | E767 0007 1C4D    |          |          | 815+      | VREP  | V22, v23, 7, 1                             | test instruction (dest is a source) |
| 000015F0 | E760 5030 080E    |          | 000015C0 | 816+      | VST   | V22, V1010                                 | save v1 output                      |
| 000015F6 | 07FB              |          |          | 817+      | BR    | R11  | return                              |
| 000015F8 |                   |          |          | 818+RE10  | DC    | 0F   | xl16 expected result                |
| 000015F8 |                   |          |          | 819+      | DROP  | R5   |                                     |
| 000015F8 | F0F0F0F0 F0F0F0F0 |          |          | 820       | DC    | XL16' F0F0F0F0 F0F0F0F0 F0F0F0F0 F0F0F0F0' | result t                            |
| 00001600 | F0F0F0F0 F0F0F0F0 |          |          |           |       |  |                                     |
| 00001608 | 01010201 010101F0 |          |          | 821       | DC    | XL16' 01010201 010101F0 01010101 0101F0F0' | v3                                  |
| 00001610 | 01010101 0101F0F0 |          |          |           |       |  |                                     |
|          |                   |          |          | 822       |       |  |                                     |



| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT      |   |                                     |
|----------|-------------------|----------|----------|-----------|---|-------------------------------------|
|          |                   |          |          | 823 *Word |   |                                     |
|          |                   |          |          | 824       | VRI_C VREP, 0, 2                              |                                     |
| 00001618 |                   |          |          | 825+      | DS OFD  |                                     |
| 00001618 |                   | 00001618 |          | 826+      | USING *, R5                                   | base for test data and test routine |
| 00001618 | 00001660          |          |          | 827+T11   | DC A(X11)                                     | address of test routine             |
| 0000161C | 000B              |          |          | 828+      | DC H' 11'                                     | test number                         |
| 0000161E | 00                |          |          | 829+      | DC X' 00'                                     |                                     |
| 0000161F | 02                |          |          | 830+      | DC HL1' 2'                                    | m3 field                            |
| 00001620 | 0000              |          |          | 831+      | DC HL2' 0'                                    | i2 used                             |
| 00001622 | E5D9C5D7 40404040 |          |          | 832+      | DC CL8' VREP'                                 | instruction name                    |
| 0000162C | 00001690          |          |          | 833+      | DC A(RE11+16)                                 | address of v2 source                |
| 00001630 | 000016A0          |          |          | 834+      | DC A(RE11+32)                                 | address of v3 source                |
| 00001634 | 00000010          |          |          | 835+      | DC A(16)                                      | result length                       |
| 00001638 | 00001680          |          |          | 836+REA11 | DC A(RE11)                                    | result address                      |
| 00001640 | 00000000 00000000 |          |          | 837+      | DS FD   | gap                                 |
| 00001648 | 00000000 00000000 |          |          | 838+V1011 | DS XL16                                       | V1 output                           |
| 00001650 | 00000000 00000000 |          |          |           |   |                                     |
| 00001658 | 00000000 00000000 |          |          | 839+      | DS FD   | gap                                 |
|          |                   |          |          | 840+*     |   |                                     |
| 00001660 |                   |          |          | 841+X11   | DS OF   |                                     |
| 00001660 | E760 8EA4 0806    |          | 000010A4 | 842+      | VL V22, V1FUDGE                               |                                     |
| 00001666 | E310 5014 0014    |          | 00000014 | 843+      | LGF R1, V2ADDR                                | load v2 source                      |
| 0000166C | E771 0000 0806    |          | 00000000 | 844+      | VL v23, 0(R1)                                 | use v23 to test decoder             |
| 00001672 | E767 0000 2C4D    |          |          | 845+      | VREP V22, v23, 0, 2                           | test instruction (dest is a source) |
| 00001678 | E760 5030 080E    |          | 00001648 | 846+      | VST V22, V1011                                | save v1 output                      |
| 0000167E | 07FB              |          |          | 847+      | BR R11  | return                              |
| 00001680 |                   |          |          | 848+RE11  | DC OF   | xl16 expected result                |
| 00001680 |                   |          |          | 849+      | DROP R5                                       |                                     |
| 00001680 | 00000101 00000101 |          |          | 850       | DC XL16' 00000101 00000101 00000101 00000101' | result                              |
| 00001688 | 00000101 00000101 |          |          |           |   |                                     |
| 00001690 | 00000101 01010101 |          |          | 851       | DC XL16' 00000101 01010101 01010101 01010101' | v3                                  |
| 00001698 | 01010101 01010101 |          |          |           |   |                                     |
|          |                   |          |          | 852       |   |                                     |
|          |                   |          |          | 853       | VRI_C VREP, 1, 2                              |                                     |
| 000016A0 |                   |          |          | 854+      | DS OFD  |                                     |
| 000016A0 |                   | 000016A0 |          | 855+      | USING *, R5                                   | base for test data and test routine |
| 000016A0 | 000016E8          |          |          | 856+T12   | DC A(X12)                                     | address of test routine             |
| 000016A4 | 000C              |          |          | 857+      | DC H' 12'                                     | test number                         |
| 000016A6 | 00                |          |          | 858+      | DC X' 00'                                     |                                     |
| 000016A7 | 02                |          |          | 859+      | DC HL1' 2'                                    | m3 field                            |
| 000016A8 | 0001              |          |          | 860+      | DC HL2' 1'                                    | i2 used                             |
| 000016AA | E5D9C5D7 40404040 |          |          | 861+      | DC CL8' VREP'                                 | instruction name                    |
| 000016B4 | 00001718          |          |          | 862+      | DC A(RE12+16)                                 | address of v2 source                |
| 000016B8 | 00001728          |          |          | 863+      | DC A(RE12+32)                                 | address of v3 source                |
| 000016BC | 00000010          |          |          | 864+      | DC A(16)                                      | result length                       |
| 000016C0 | 00001708          |          |          | 865+REA12 | DC A(RE12)                                    | result address                      |
| 000016C8 | 00000000 00000000 |          |          | 866+      | DS FD   | gap                                 |
| 000016D0 | 00000000 00000000 |          |          | 867+V1012 | DS XL16                                       | V1 output                           |
| 000016D8 | 00000000 00000000 |          |          |           |   |                                     |
| 000016E0 | 00000000 00000000 |          |          | 868+      | DS FD   | gap                                 |
|          |                   |          |          | 869+*     |   |                                     |
| 000016E8 |                   |          |          | 870+X12   | DS OF   |                                     |
| 000016E8 | E760 8EA4 0806    |          | 000010A4 | 871+      | VL V22, V1FUDGE                               |                                     |
| 000016EE | E310 5014 0014    |          | 00000014 | 872+      | LGF R1, V2ADDR                                | load v2 source                      |
| 000016F4 | E771 0000 0806    |          | 00000000 | 873+      | VL v23, 0(R1)                                 | use v23 to test decoder             |
| 000016FA | E767 0001 2C4D    |          |          | 874+      | VREP V22, v23, 1, 2                           | test instruction (dest is a source) |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT      |       |  |                                     |
|----------|-------------------|----------|----------|-----------|-------|--|-------------------------------------|
| 00001700 | E760 5030 080E    |          | 000016D0 | 875+      | VST   | V22, V1012                                 | save v1 output                      |
| 00001706 | 07FB              |          |          | 876+      | BR    | R11  | return                              |
| 00001708 |                   |          |          | 877+RE12  | DC    | 0F   | xl16 expected result                |
| 00001708 |                   |          |          | 878+      | DROP  | R5   |                                     |
| 00001708 | 01077101 01077101 |          |          | 879       | DC    | XL16' 01077101 01077101 01077101 01077101' | result t                            |
| 00001710 | 01077101 01077101 |          |          |           |       |  |                                     |
| 00001718 | 0001B109 01077101 |          | 880      |           | DC    | XL16' 0001B109 01077101 01010101 01010101' | v3                                  |
| 00001720 | 01010101 01010101 |          |          |           |       |  |                                     |
|          |                   |          |          | 881       |       |  |                                     |
|          |                   |          |          | 882       | VRI_C | VREP, 2, 2                                 |                                     |
| 00001728 |                   |          |          | 883+      | DS    | 0FD  |                                     |
| 00001728 |                   | 00001728 |          | 884+      | USING | *, R5                                      | base for test data and test routine |
| 00001728 | 00001770          |          |          | 885+T13   | DC    | A(X13)                                     | address of test routine             |
| 0000172C | 000D              |          |          | 886+      | DC    | H' 13'                                     | test number                         |
| 0000172E | 00                |          |          | 887+      | DC    | X' 00'                                     |                                     |
| 0000172F | 02                |          |          | 888+      | DC    | HL1' 2'                                    | m3 field                            |
| 00001730 | 0002              |          |          | 889+      | DC    | HL2' 2'                                    | i2 used                             |
| 00001732 | E5D9C5D7 40404040 |          |          | 890+      | DC    | CL8' VREP'                                 | instruction name                    |
| 0000173C | 000017A0          |          |          | 891+      | DC    | A(RE13+16)                                 | address of v2 source                |
| 00001740 | 000017B0          |          |          | 892+      | DC    | A(RE13+32)                                 | address of v3 source                |
| 00001744 | 00000010          |          |          | 893+      | DC    | A(16)                                      | result length                       |
| 00001748 | 00001790          |          |          | 894+REA13 | DC    | A(RE13)                                    | result address                      |
| 00001750 | 00000000 00000000 |          |          | 895+      | DS    | FD   | gap                                 |
| 00001758 | 00000000 00000000 |          |          | 896+V1013 | DS    | XL16                                       | V1 output                           |
| 00001760 | 00000000 00000000 |          |          |           |       |  |                                     |
| 00001768 | 00000000 00000000 |          |          | 897+      | DS    | FD   | gap                                 |
|          |                   |          |          | 898+*     |       |  |                                     |
| 00001770 |                   |          |          | 899+X13   | DS    | 0F   |                                     |
| 00001770 | E760 8EA4 0806    |          | 000010A4 | 900+      | VL    | V22, V1FUDGE                               |                                     |
| 00001776 | E310 5014 0014    |          | 00000014 | 901+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 0000177C | E771 0000 0806    |          | 00000000 | 902+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 00001782 | E767 0002 2C4D    |          |          | 903+      | VREP  | V22, v23, 2, 2                             | test instruction (dest is a source) |
| 00001788 | E760 5030 080E    |          | 00001758 | 904+      | VST   | V22, V1013                                 | save v1 output                      |
| 0000178E | 07FB              |          |          | 905+      | BR    | R11  | return                              |
| 00001790 |                   |          |          | 906+RE13  | DC    | 0F   | xl16 expected result                |
| 00001790 |                   |          |          | 907+      | DROP  | R5   |                                     |
| 00001790 | A010101A A010101A |          |          | 908       | DC    | XL16' A010101A A010101A A010101A A010101A' | result t                            |
| 00001798 | A010101A A010101A |          |          |           |       |  |                                     |
| 000017A0 | 01010201 07770101 |          |          | 909       | DC    | XL16' 01010201 07770101 A010101A 01010101' | v3                                  |
| 000017A8 | A010101A 01010101 |          |          |           |       |  |                                     |
|          |                   |          |          | 910       |       |  |                                     |
|          |                   |          |          | 911       | VRI_C | VREP, 3, 2                                 |                                     |
| 000017B0 |                   |          |          | 912+      | DS    | 0FD  |                                     |
| 000017B0 |                   | 000017B0 |          | 913+      | USING | *, R5                                      | base for test data and test routine |
| 000017B0 | 000017F8          |          |          | 914+T14   | DC    | A(X14)                                     | address of test routine             |
| 000017B4 | 000E              |          |          | 915+      | DC    | H' 14'                                     | test number                         |
| 000017B6 | 00                |          |          | 916+      | DC    | X' 00'                                     |                                     |
| 000017B7 | 02                |          |          | 917+      | DC    | HL1' 2'                                    | m3 field                            |
| 000017B8 | 0003              |          |          | 918+      | DC    | HL2' 3'                                    | i2 used                             |
| 000017BA | E5D9C5D7 40404040 |          |          | 919+      | DC    | CL8' VREP'                                 | instruction name                    |
| 000017C4 | 00001828          |          |          | 920+      | DC    | A(RE14+16)                                 | address of v2 source                |
| 000017C8 | 00001838          |          |          | 921+      | DC    | A(RE14+32)                                 | address of v3 source                |
| 000017CC | 00000010          |          |          | 922+      | DC    | A(16)                                      | result length                       |
| 000017D0 | 00001818          |          |          | 923+REA14 | DC    | A(RE14)                                    | result address                      |
| 000017D8 | 00000000 00000000 |          |          | 924+      | DS    | FD   | gap                                 |
| 000017E0 | 00000000 00000000 |          |          | 925+V1014 | DS    | XL16                                       | V1 output                           |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT      |       |  |                                     |
|----------|-------------------|----------|----------|-----------|-------|--|-------------------------------------|
| 000017E8 | 00000000 00000000 |          |          |           |       |  |                                     |
| 000017F0 | 00000000 00000000 |          |          | 926+      | DS    | FD   | gap                                 |
|          |                   |          |          | 927+*     |       |  |                                     |
| 000017F8 |                   |          |          | 928+X14   | DS    | 0F   |                                     |
| 000017F8 | E760 8EA4 0806    |          | 000010A4 | 929+      | VL    | V22, V1FUDGE                               |                                     |
| 000017FE | E310 5014 0014    |          | 00000014 | 930+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 00001804 | E771 0000 0806    |          | 00000000 | 931+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 0000180A | E767 0003 2C4D    |          |          | 932+      | VREP  | V22, v23, 3, 2                             | test instruction (dest is a source) |
| 00001810 | E760 5030 080E    |          | 000017E0 | 933+      | VST   | V22, V1014                                 | save v1 output                      |
| 00001816 | 07FB              |          |          | 934+      | BR    | R11  | return                              |
| 00001818 |                   |          |          | 935+RE14  | DC    | 0F   | xl16 expected result                |
| 00001818 |                   |          |          | 936+      | DROP  | R5   |                                     |
| 00001818 | BOBOA1A1 BOBOA1A1 |          |          | 937       | DC    | XL16' BOBOA1A1 BOBOA1A1 BOBOA1A1 BOBOA1A1' | result                              |
| 00001820 | BOBOA1A1 BOBOA1A1 |          |          |           |       |  |                                     |
| 00001828 | 01010201 07770101 |          |          | 938       | DC    | XL16' 01010201 07770101 FFA10101 BOBOA1A1' | v3                                  |
| 00001830 | FFA10101 BOBOA1A1 |          |          |           |       |  |                                     |
|          |                   |          |          | 939       |       |  |                                     |
|          |                   |          |          | 940 *Word |       |  |                                     |
|          |                   |          |          | 941       | VRI_C | VREP, 0, 3                                 |                                     |
| 00001838 |                   |          |          | 942+      | DS    | 0FD  |                                     |
| 00001838 |                   | 00001838 |          | 943+      | USING | *, R5                                      | base for test data and test routine |
| 00001838 | 00001880          |          |          | 944+T15   | DC    | A(X15)                                     | address of test routine             |
| 0000183C | 000F              |          |          | 945+      | DC    | H' 15'                                     | test number                         |
| 0000183E | 00                |          |          | 946+      | DC    | X' 00'                                     |                                     |
| 0000183F | 03                |          |          | 947+      | DC    | HL1' 3'                                    | m3 field                            |
| 00001840 | 0000              |          |          | 948+      | DC    | HL2' 0'                                    | i2 used                             |
| 00001842 | E5D9C5D7 40404040 |          |          | 949+      | DC    | CL8' VREP'                                 | instruction name                    |
| 0000184C | 000018B0          |          |          | 950+      | DC    | A(RE15+16)                                 | address of v2 source                |
| 00001850 | 000018C0          |          |          | 951+      | DC    | A(RE15+32)                                 | address of v3 source                |
| 00001854 | 00000010          |          |          | 952+      | DC    | A(16)                                      | result length                       |
| 00001858 | 000018A0          |          |          | 953+REA15 | DC    | A(RE15)                                    | result address                      |
| 00001860 | 00000000 00000000 |          |          | 954+      | DS    | FD   | gap                                 |
| 00001868 | 00000000 00000000 |          |          | 955+V1015 | DS    | XL16                                       | V1 output                           |
| 00001870 | 00000000 00000000 |          |          |           |       |  |                                     |
| 00001878 | 00000000 00000000 |          |          | 956+      | DS    | FD   | gap                                 |
|          |                   |          |          | 957+*     |       |  |                                     |
| 00001880 |                   |          |          | 958+X15   | DS    | 0F   |                                     |
| 00001880 | E760 8EA4 0806    |          | 000010A4 | 959+      | VL    | V22, V1FUDGE                               |                                     |
| 00001886 | E310 5014 0014    |          | 00000014 | 960+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 0000188C | E771 0000 0806    |          | 00000000 | 961+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 00001892 | E767 0000 3C4D    |          |          | 962+      | VREP  | V22, v23, 0, 3                             | test instruction (dest is a source) |
| 00001898 | E760 5030 080E    |          | 00001868 | 963+      | VST   | V22, V1015                                 | save v1 output                      |
| 0000189E | 07FB              |          |          | 964+      | BR    | R11  | return                              |
| 000018A0 |                   |          |          | 965+RE15  | DC    | 0F   | xl16 expected result                |
| 000018A0 |                   |          |          | 966+      | DROP  | R5   |                                     |
| 000018A0 | 00000101 01010101 |          |          | 967       | DC    | XL16' 00000101 01010101 00000101 01010101' | result                              |
| 000018A8 | 00000101 01010101 |          |          |           |       |  |                                     |
| 000018B0 | 00000101 01010101 |          |          | 968       | DC    | XL16' 00000101 01010101 01010101 01010101' | v3                                  |
| 000018B8 | 01010101 01010101 |          |          |           |       |  |                                     |
|          |                   |          |          | 969       |       |  |                                     |
|          |                   |          |          | 970       | VRI_C | VREP, 0, 3                                 |                                     |
| 000018C0 |                   |          |          | 971+      | DS    | 0FD  |                                     |
| 000018C0 |                   | 000018C0 |          | 972+      | USING | *, R5                                      | base for test data and test routine |
| 000018C0 | 00001908          |          |          | 973+T16   | DC    | A(X16)                                     | address of test routine             |
| 000018C4 | 0010              |          |          | 974+      | DC    | H' 16'                                     | test number                         |
| 000018C6 | 00                |          |          | 975+      | DC    | X' 00'                                     |                                     |



| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT       |       |  |                                     |
|----------|-------------------|----------|----------|------------|-------|--|-------------------------------------|
| 000018C7 | 03                |          |          | 976+       | DC    | HL1' 3'                                    | m3 field                            |
| 000018C8 | 0000              |          |          | 977+       | DC    | HL2' 0'                                    | i2 used                             |
| 000018CA | E5D9C5D7 40404040 |          |          | 978+       | DC    | CL8' VREP'                                 | instruction name                    |
| 000018D4 | 00001938          |          |          | 979+       | DC    | A(RE16+16)                                 | address of v2 source                |
| 000018D8 | 00001948          |          |          | 980+       | DC    | A(RE16+32)                                 | address of v3 source                |
| 000018DC | 00000010          |          |          | 981+       | DC    | A(16)                                      | result length                       |
| 000018E0 | 00001928          |          |          | 982+REA16  | DC    | A(RE16)                                    | result address                      |
| 000018E8 | 00000000 00000000 |          |          | 983+       | DS    | FD   | gap                                 |
| 000018F0 | 00000000 00000000 |          |          | 984+V1016  | DS    | XL16                                       | V1 output                           |
| 000018F8 | 00000000 00000000 |          |          |            |       |  |                                     |
| 00001900 | 00000000 00000000 |          |          | 985+       | DS    | FD   | gap                                 |
|          |                   |          |          | 986+*      |       |  |                                     |
| 00001908 |                   |          |          | 987+X16    | DS    | 0F   |                                     |
| 00001908 | E760 8EA4 0806    |          | 000010A4 | 988+       | VL    | V22, V1FUDGE                               |                                     |
| 0000190E | E310 5014 0014    |          | 00000014 | 989+       | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 00001914 | E771 0000 0806    |          | 00000000 | 990+       | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 0000191A | E767 0000 3C4D    |          |          | 991+       | VREP  | V22, v23, 0, 3                             | test instruction (dest is a source) |
| 00001920 | E760 5030 080E    |          | 000018F0 | 992+       | VST   | V22, V1016                                 | save v1 output                      |
| 00001926 | 07FB              |          |          | 993+       | BR    | R11  | return                              |
| 00001928 |                   |          |          | 994+RE16   | DC    | 0F   | xl16 expected result                |
| 00001928 |                   |          |          | 995+       | DROP  | R5   |                                     |
| 00001928 | 0001B109 01077101 |          |          | 996        | DC    | XL16' 0001B109 01077101 0001B109 01077101' | result t                            |
| 00001930 | 0001B109 01077101 |          |          |            |       |  |                                     |
| 00001938 | 0001B109 01077101 |          |          | 997        | DC    | XL16' 0001B109 01077101 01010101 01010101' | v3                                  |
| 00001940 | 01010101 01010101 |          |          |            |       |  |                                     |
|          |                   |          |          | 998        |       |  |                                     |
|          |                   |          |          | 999        | VRI_C | VREP, 1, 3                                 |                                     |
| 00001948 |                   |          |          | 1000+      | DS    | 0FD  |                                     |
| 00001948 |                   | 00001948 |          | 1001+      | USING | *, R5                                      | base for test data and test routine |
| 00001948 | 00001990          |          |          | 1002+T17   | DC    | A(X17)                                     | address of test routine             |
| 0000194C | 0011              |          |          | 1003+      | DC    | H' 17'                                     | test number                         |
| 0000194E | 00                |          |          | 1004+      | DC    | X' 00'                                     |                                     |
| 0000194F | 03                |          |          | 1005+      | DC    | HL1' 3'                                    | m3 field                            |
| 00001950 | 0001              |          |          | 1006+      | DC    | HL2' 1'                                    | i2 used                             |
| 00001952 | E5D9C5D7 40404040 |          |          | 1007+      | DC    | CL8' VREP'                                 | instruction name                    |
| 0000195C | 000019C0          |          |          | 1008+      | DC    | A(RE17+16)                                 | address of v2 source                |
| 00001960 | 000019D0          |          |          | 1009+      | DC    | A(RE17+32)                                 | address of v3 source                |
| 00001964 | 00000010          |          |          | 1010+      | DC    | A(16)                                      | result length                       |
| 00001968 | 000019B0          |          |          | 1011+REA17 | DC    | A(RE17)                                    | result address                      |
| 00001970 | 00000000 00000000 |          |          | 1012+      | DS    | FD   | gap                                 |
| 00001978 | 00000000 00000000 |          |          | 1013+V1017 | DS    | XL16                                       | V1 output                           |
| 00001980 | 00000000 00000000 |          |          |            |       |  |                                     |
| 00001988 | 00000000 00000000 |          |          | 1014+      | DS    | FD   | gap                                 |
|          |                   |          |          | 1015+*     |       |  |                                     |
| 00001990 |                   |          |          | 1016+X17   | DS    | 0F   |                                     |
| 00001990 | E760 8EA4 0806    |          | 000010A4 | 1017+      | VL    | V22, V1FUDGE                               |                                     |
| 00001996 | E310 5014 0014    |          | 00000014 | 1018+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 0000199C | E771 0000 0806    |          | 00000000 | 1019+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 000019A2 | E767 0001 3C4D    |          |          | 1020+      | VREP  | V22, v23, 1, 3                             | test instruction (dest is a source) |
| 000019A8 | E760 5030 080E    |          | 00001978 | 1021+      | VST   | V22, V1017                                 | save v1 output                      |
| 000019AE | 07FB              |          |          | 1022+      | BR    | R11  | return                              |
| 000019B0 |                   |          |          | 1023+RE17  | DC    | 0F   | xl16 expected result                |
| 000019B0 |                   |          |          | 1024+      | DROP  | R5   |                                     |
| 000019B0 | A010101A 01010101 |          |          | 1025       | DC    | XL16' A010101A 01010101 A010101A 01010101' | result t                            |
| 000019B8 | A010101A 01010101 |          |          |            |       |  |                                     |
| 000019C0 | 01010201 07770101 |          |          | 1026       | DC    | XL16' 01010201 07770101 A010101A 01010101' | v3                                  |

| LOC      | OBJECT CODE       | ADDR1    | ADDR2    | STMT       |       |  |                                     |
|----------|-------------------|----------|----------|------------|-------|--|-------------------------------------|
| 000019C8 | A010101A 01010101 |          |          | 1027       |       |  |                                     |
|          |                   |          |          | 1028       | VRI_C | VREP, 1, 3                                 |                                     |
| 000019D0 |                   |          |          | 1029+      | DS    | 0FD  |                                     |
| 000019D0 |                   | 000019D0 |          | 1030+      | USING | *, R5                                      | base for test data and test routine |
| 000019D0 | 00001A18          |          |          | 1031+T18   | DC    | A(X18)                                     | address of test routine             |
| 000019D4 | 0012              |          |          | 1032+      | DC    | H' 18'                                     | test number                         |
| 000019D6 | 00                |          |          | 1033+      | DC    | X' 00'                                     |                                     |
| 000019D7 | 03                |          |          | 1034+      | DC    | HL1' 3'                                    | m3 field                            |
| 000019D8 | 0001              |          |          | 1035+      | DC    | HL2' 1'                                    | i2 used                             |
| 000019DA | E5D9C5D7 40404040 |          |          | 1036+      | DC    | CL8' VREP'                                 | instruction name                    |
| 000019E4 | 00001A48          |          |          | 1037+      | DC    | A(RE18+16)                                 | address of v2 source                |
| 000019E8 | 00001A58          |          |          | 1038+      | DC    | A(RE18+32)                                 | address of v3 source                |
| 000019EC | 00000010          |          |          | 1039+      | DC    | A(16)                                      | result length                       |
| 000019F0 | 00001A38          |          |          | 1040+REA18 | DC    | A(RE18)                                    | result address                      |
| 000019F8 | 00000000 00000000 |          |          | 1041+      | DS    | FD   | gap                                 |
| 00001A00 | 00000000 00000000 |          |          | 1042+V1018 | DS    | XL16                                       | V1 output                           |
| 00001A08 | 00000000 00000000 |          |          |            |       |  |                                     |
| 00001A10 | 00000000 00000000 |          |          | 1043+      | DS    | FD   | gap                                 |
|          |                   |          |          | 1044+*     |       |  |                                     |
| 00001A18 |                   |          |          | 1045+X18   | DS    | 0F   |                                     |
| 00001A18 | E760 8EA4 0806    |          | 000010A4 | 1046+      | VL    | V22, V1FUDGE                               |                                     |
| 00001A1E | E310 5014 0014    |          | 00000014 | 1047+      | LGF   | R1, V2ADDR                                 | load v2 source                      |
| 00001A24 | E771 0000 0806    |          | 00000000 | 1048+      | VL    | v23, 0(R1)                                 | use v23 to test decoder             |
| 00001A2A | E767 0001 3C4D    |          |          | 1049+      | VREP  | V22, v23, 1, 3                             | test instruction (dest is a source) |
| 00001A30 | E760 5030 080E    |          | 00001A00 | 1050+      | VST   | V22, V1018                                 | save v1 output                      |
| 00001A36 | 07FB              |          |          | 1051+      | BR    | R11  | return                              |
| 00001A38 |                   |          |          | 1052+RE18  | DC    | 0F   | xl16 expected result                |
| 00001A38 |                   |          |          | 1053+      | DROP  | R5   |                                     |
| 00001A38 | FFA10101 B0B0A1A1 |          |          | 1054       | DC    | XL16' FFA10101 B0B0A1A1 FFA10101 B0B0A1A1' | result                              |
| 00001A40 | FFA10101 B0B0A1A1 |          |          |            |       |  |                                     |
| 00001A48 | 01010201 07770101 |          |          | 1055       | DC    | XL16' 01010201 07770101 FFA10101 B0B0A1A1' | v3                                  |
| 00001A50 | FFA10101 B0B0A1A1 |          |          |            |       |  |                                     |
|          |                   |          |          | 1056       |       |  |                                     |
|          |                   |          |          | 1057       |       |  |                                     |
|          |                   |          |          | 1058       |       |  |                                     |
| 00001A58 | 00000000          |          |          | 1059       | DC    | F' 0'                                      | END OF TABLE                        |
| 00001A5C | 00000000          |          |          | 1060       | DC    | F' 0'                                      |                                     |



| LOC | OBJECT | CODE | ADDR1    | ADDR2    | STMT |       |                  |    |
|-----|--------|------|----------|----------|------|-------|------------------|----|
|     |        |      |          |          | 1093 | ***** |                  |    |
|     |        |      |          |          | 1094 | *     | Register equates |    |
|     |        |      |          |          | 1095 | ***** |                  |    |
|     |        |      |          |          |      |       |                  |    |
|     |        |      | 00000000 | 00000001 | 1097 | R0    | EQU              | 0  |
|     |        |      | 00000001 | 00000001 | 1098 | R1    | EQU              | 1  |
|     |        |      | 00000002 | 00000001 | 1099 | R2    | EQU              | 2  |
|     |        |      | 00000003 | 00000001 | 1100 | R3    | EQU              | 3  |
|     |        |      | 00000004 | 00000001 | 1101 | R4    | EQU              | 4  |
|     |        |      | 00000005 | 00000001 | 1102 | R5    | EQU              | 5  |
|     |        |      | 00000006 | 00000001 | 1103 | R6    | EQU              | 6  |
|     |        |      | 00000007 | 00000001 | 1104 | R7    | EQU              | 7  |
|     |        |      | 00000008 | 00000001 | 1105 | R8    | EQU              | 8  |
|     |        |      | 00000009 | 00000001 | 1106 | R9    | EQU              | 9  |
|     |        |      | 0000000A | 00000001 | 1107 | R10   | EQU              | 10 |
|     |        |      | 0000000B | 00000001 | 1108 | R11   | EQU              | 11 |
|     |        |      | 0000000C | 00000001 | 1109 | R12   | EQU              | 12 |
|     |        |      | 0000000D | 00000001 | 1110 | R13   | EQU              | 13 |
|     |        |      | 0000000E | 00000001 | 1111 | R14   | EQU              | 14 |
|     |        |      | 0000000F | 00000001 | 1112 | R15   | EQU              | 15 |
|     |        |      |          |          |      |       |                  |    |
|     |        |      |          |          |      |       |                  |    |
|     |        |      |          |          | 1114 | ***** |                  |    |
|     |        |      |          |          | 1115 | *     | Register equates |    |
|     |        |      |          |          | 1116 | ***** |                  |    |
|     |        |      |          |          |      |       |                  |    |
|     |        |      | 00000000 | 00000001 | 1118 | V0    | EQU              | 0  |
|     |        |      | 00000001 | 00000001 | 1119 | V1    | EQU              | 1  |
|     |        |      | 00000002 | 00000001 | 1120 | V2    | EQU              | 2  |
|     |        |      | 00000003 | 00000001 | 1121 | V3    | EQU              | 3  |
|     |        |      | 00000004 | 00000001 | 1122 | V4    | EQU              | 4  |
|     |        |      | 00000005 | 00000001 | 1123 | V5    | EQU              | 5  |
|     |        |      | 00000006 | 00000001 | 1124 | V6    | EQU              | 6  |
|     |        |      | 00000007 | 00000001 | 1125 | V7    | EQU              | 7  |
|     |        |      | 00000008 | 00000001 | 1126 | V8    | EQU              | 8  |
|     |        |      | 00000009 | 00000001 | 1127 | V9    | EQU              | 9  |
|     |        |      | 0000000A | 00000001 | 1128 | V10   | EQU              | 10 |
|     |        |      | 0000000B | 00000001 | 1129 | V11   | EQU              | 11 |
|     |        |      | 0000000C | 00000001 | 1130 | V12   | EQU              | 12 |
|     |        |      | 0000000D | 00000001 | 1131 | V13   | EQU              | 13 |
|     |        |      | 0000000E | 00000001 | 1132 | V14   | EQU              | 14 |
|     |        |      | 0000000F | 00000001 | 1133 | V15   | EQU              | 15 |
|     |        |      | 00000010 | 00000001 | 1134 | V16   | EQU              | 16 |
|     |        |      | 00000011 | 00000001 | 1135 | V17   | EQU              | 17 |
|     |        |      | 00000012 | 00000001 | 1136 | V18   | EQU              | 18 |
|     |        |      | 00000013 | 00000001 | 1137 | V19   | EQU              | 19 |
|     |        |      | 00000014 | 00000001 | 1138 | V20   | EQU              | 20 |
|     |        |      | 00000015 | 00000001 | 1139 | V21   | EQU              | 21 |



| SYMBOL   | TYPE | VALUE    | LENGTH | DEFN | REFERENCES |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
|----------|------|----------|--------|------|------------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|--|--|
| BEGIN    | I    | 00000200 | 2      | 151  | 117        | 147  | 148  | 149  |      |      |      |     |     |     |     |     |     |  |  |
| CTLR0    | F    | 000004A4 | 4      | 351  | 161        | 162  | 163  | 164  |      |      |      |     |     |     |     |     |     |  |  |
| DECNUM   | C    | 00001081 | 16     | 404  | 260        | 262  | 268  | 270  | 274  | 276  |      |     |     |     |     |     |     |  |  |
| E7TEST   | 4    | 00000000 | 72     | 418  | 210        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| E7TESTS  | F    | 00001A60 | 4      | 1065 | 203        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| EDIT     | X    | 00001055 | 18     | 399  | 261        | 269  | 275  |      |      |      |      |     |     |     |     |     |     |  |  |
| ENDTEST  | U    | 00000318 | 1      | 246  | 208        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| E0J      | I    | 00000488 | 4      | 341  | 196        | 249  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| E0JPSW   | D    | 00000478 | 8      | 339  | 341        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| FAILCONT | U    | 00000308 | 1      | 236  |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| FAILED   | F    | 00001000 | 4      | 379  | 238        | 247  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| FAILMSG  | U    | 00000304 | 1      | 230  | 220        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| FAILPSW  | D    | 00000490 | 8      | 343  | 345        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| FAILTEST | I    | 000004A0 | 4      | 345  | 250        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| FB0001   | F    | 00000280 | 8      | 180  | 184        | 185  | 187  |      |      |      |      |     |     |     |     |     |     |  |  |
| I2       | U    | 00000008 | 2      | 424  | 267        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| IMAGE    | 1    | 00000000 | 6840   | 0    |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| K        | U    | 00000400 | 1      | 363  | 364        | 365  | 366  |      |      |      |      |     |     |     |     |     |     |  |  |
| K64      | U    | 00010000 | 1      | 365  |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| M        | U    | 00000007 | 1      | 423  | 273        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MB       | U    | 00100000 | 1      | 366  |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MSG      | I    | 000003C0 | 4      | 301  | 195        | 284  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MSGCMD   | C    | 0000040E | 9      | 331  | 314        | 315  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MSGMSG   | C    | 00000417 | 95     | 332  | 308        | 329  | 306  |      |      |      |      |     |     |     |     |     |     |  |  |
| MSGMVC   | I    | 00000408 | 6      | 329  | 312        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MSGOK    | I    | 000003D6 | 2      | 310  | 307        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MSGRET   | I    | 000003F6 | 4      | 325  | 318        | 321  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| MSGSAVE  | F    | 000003FC | 4      | 328  | 304        | 325  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| NEXTE7   | U    | 000002D4 | 1      | 205  | 223        | 241  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| OPNAME   | C    | 0000000A | 8      | 426  | 265        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PAGE     | U    | 00001000 | 1      | 364  |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PRT3     | C    | 0000106B | 18     | 402  | 261        | 262  | 263  | 269  | 270  | 271  | 275  | 276 | 277 |     |     |     |     |  |  |
| PRTI2    | C    | 00001044 | 5      | 390  | 271        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PRTLIN   | C    | 00001008 | 16     | 385  | 394        | 283  |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PRTLNG   | U    | 0000004D | 1      | 394  | 282        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PRTM     | C    | 00001052 | 2      | 392  | 277        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PRTNAME  | C    | 00001033 | 8      | 388  | 265        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| PRTNUM   | C    | 00001018 | 3      | 386  | 263        |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| R0       | U    | 00000000 | 1      | 1097 | 111        | 161  | 164  | 184  | 186  | 187  | 188  | 193 | 212 | 213 | 237 | 238 | 281 |  |  |
| R1       | U    | 00000001 | 1      | 1098 | 282        | 285  | 301  | 304  | 306  | 308  | 310  | 325 |     |     |     |     |     |  |  |
|          |      |          |        |      | 194        | 218  | 219  | 247  | 248  | 283  | 315  | 329 | 551 | 552 | 580 | 581 | 609 |  |  |
|          |      |          |        |      | 610        | 638  | 639  | 667  | 668  | 697  | 698  | 726 | 727 | 755 | 756 | 784 | 785 |  |  |
|          |      |          |        |      | 813        | 814  | 843  | 844  | 872  | 873  | 901  | 902 | 930 | 931 | 960 | 961 | 989 |  |  |
| R10      | U    | 0000000A | 1      | 1107 | 990        | 1018 | 1019 | 1047 | 1048 |      |      |     |     |     |     |     |     |  |  |
|          |      |          |        |      | 149        | 158  | 159  |      |      |      |      |     |     |     |     |     |     |  |  |
|          |      |          |        |      | 215        | 216  | 555  | 584  | 613  | 642  | 671  | 701 | 730 | 759 | 788 | 817 | 847 |  |  |
|          |      |          |        |      | 876        | 905  | 934  | 964  | 993  | 1022 | 1051 |     |     |     |     |     |     |  |  |
| R12      | U    | 0000000C | 1      | 1109 | 203        | 206  | 222  | 240  |      |      |      |     |     |     |     |     |     |  |  |
| R13      | U    | 0000000D | 1      | 1110 |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| R14      | U    | 0000000E | 1      | 1111 |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| R15      | U    | 0000000F | 1      | 1112 | 231        | 256  | 288  | 289  |      |      |      |     |     |     |     |     |     |  |  |
| R2       | U    | 00000002 | 1      | 1099 | 195        | 259  | 260  | 267  | 268  | 273  | 274  | 281 | 284 | 285 | 302 | 304 | 310 |  |  |
| R3       | U    | 00000003 | 1      | 1100 | 311        | 312  | 314  | 320  | 325  | 326  |      |     |     |     |     |     |     |  |  |
|          |      |          |        |      |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
|          |      |          |        |      |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| R4       | U    | 00000004 | 1      | 1101 |            |      |      |      |      |      |      |     |     |     |     |     |     |  |  |
| R5       | U    | 00000005 | 1      | 1102 | 206        | 207  | 210  | 257  | 287  | 534  | 557  | 563 | 586 | 592 | 615 | 621 | 644 |  |  |











| DESC | SYMBOL | SIZE | POS | ADDR |
|------|--------|------|-----|------|
|------|--------|------|-----|------|

**Entry: 0**

|         |         |      |            |            |
|---------|---------|------|------------|------------|
| Image   | IMAGE   | 6840 | 0000- 1AB7 | 0000- 1AB7 |
| Regi on |         | 6840 | 0000- 1AB7 | 0000- 1AB7 |
| CSECT   | ZVE7TST | 6840 | 0000- 1AB7 | 0000- 1AB7 |

| STMT | FILE NAME |
|------|-----------|
|------|-----------|

|   |  |
|---|--|
| 1 | /home/tn529/sharedvfp/tests/zvector-e7-22-VREP.asm |
|---|--|

**\*\* NO ERRORS FOUND \*\***