```
CLEAR STORAGE 1     ,008015,022026,030037,044,049,053053N000000N00001026                                  1
CLEAR STORAGE 2     L068116,105106,110117B101/I9I#071029C029056B026/B001/0991,001/001117I0?               2
BOOTSTRAP           ,008015,022029,036040,047054,061068,072/061039            ,0010011040                3

                          HZG DEMO                                                  SGSVU              PAGE    1

 SEQ PG LIN  LABEL  OP    OPERANDS                                           SFX CT  LOCN  INSTRUCTION TYPE  CARD

 101                JOB   HZG DEMO
 102                CTL   6611
 103         *
 104         * CONTROL CARD LAYOUT
 105         *
 106         I3LEN  EQU   4    1-4     TAPE 3 RECORD LENGTH                            0004
 107         I3WMAX EQU   8    6-8     TAPE 3 RECORDS UNTIL REWIND                     0008
 108         I3PMAX EQU   11   10-11   TAPE 3 PROCESSING DELAY                         0011
 109         I3RDLY EQU   16   13-16   TAPE 3 REWIND DELAY                             0016
 110         I4LEN  EQU   21   18-21   TAPE 4 RECORD LENGTH                            0021
 111         I4WMAX EQU   25   23-25   TAPE 4 RECORDS UNTIL REWIND                     0025
 112         I4PMAX EQU   28   27-28   TAPE 4 PROCESSING DELAY                         0028
 113         I4RDLY EQU   33   30-33   TAPE 4 REWIND DELAY                             0033
 114         I5LEN  EQU   38   35-38   TAPE 5 RECORD LENGTH                            0038
 115         I5WMAX EQU   42   40-42   TAPE 5 RECORDS UNTIL REWIND                     0042
 116         I5PMAX EQU   45   44-45   TAPE 5 PROCESSING DELAY                         0045
 117         I5RDLY EQU   50   47-50   TAPE 5 REWIND DELAY                             0050
 118         I6LEN  EQU   55   52-55   TAPE 6 RECORD LENGTH                            0055
 119         I6WMAX EQU   59   57-59   TAPE 6 RECORDS UNTIL REWIND                     0059
 120         I6PMAX EQU   62   61-62   TAPE 6 PROCESSING DELAY                         0062
 121         I6RDLY EQU   67   64-67   TAPE 6 REWIND DELAY                             0067
 122         IRDLY  EQU   72   69-72   FULL REEL TAPE REWIND DELAY                     0072
 123         IDDLY  EQU   75   74-75   DISK PROCESSING DELAY                           0075
 124         IDPSW  EQU   80           PRINT DISK ADDRESSES IF NON BLANK               0080
 125         *
 126                ORG   81           RECORD MARK AT 81 WILL BE                              0081
 127                DC    @'@          SENTINEL AFTER LAST LINE OF IMAGE          1  0081                       4
 128         KP1    DCW   &1                                                      1  0082                       4
 129         KB     DCW   #1           CHANGES BSS C TO BRANCH                    1  0083                       4
 130         KC     DCW   @C@          CHANGES BRANCH TO BSS C                    1  0084                       4
 131                DC    @..@                                                    2  0086                       4
 132         X1     DCW   081                                                     3  0089                       4
 133                DC    @..@                                                    2  0091                       4
 134         X2     DCW   010                                                     3  0094                       5
 135                DC    @..@                                                    2  0096                       5
 136         X3     DCW   000                                                     3  0099                       5
 137         GMWM   DCW   @"@                                                     1  0100                       5
 138                ORG   336                                                            0336
 139         *
 140         * LOAD PARAMETERS
 141         *
 142         START  R                                                             1  0336  1                    6
 143                MCW   I3RDLY,T3RDLY      TAPE 3 REWIND DELAY                  7  0337  M 016 |39            6
 144                MCW                      TAPE 3 PROCESSING DELAY              1  0344  M                    6
 145                MCW                      TAPE 3 RECORDS UNTIL REWIND          1  0345  M                    6
 146                MCW   I4RDLY,T4RDLY      TAPE 4 REWIND DELAY                  7  0346  M 033 |67            6
 147                MCW                      TAPE 4 PROCESSING DELAY              1  0353  M                    6


                          HZG DEMO                                                  SGSVU              PAGE    2

 SEQ PG LIN  LABEL  OP    OPERANDS                                           SFX CT  LOCN  INSTRUCTION TYPE  CARD

 148                MCW                      TAPE 4 RECORDS UNTIL REWIND          1  0354  M                    6
 149                MCW   I5RDLY,T5RDLY      TAPE 5 REWIND DELAY                  7  0355  M 050 |95            7
 150                MCW                      TAPE 5 PROCESSING DELAY              1  0362  M                    7
 151                MCW                      TAPE 5 RECORDS UNTIL REWIND          1  0363  M                    7
 152                MCW   I6RDLY,T6RDLY      TAPE 6 REWIND DELAY                  7  0364  M 067 /23            7
 153                MCW                      TAPE 6 PROCESSING DELAY              1  0371  M                    7
 154                MCW                      TAPE 6 RECORDS UNTIL REWIND          1  0372  M                    7
 155                MCW   IRDLY,RDELAY       REWIND FULL TAPE DELAY COUNT         7  0373  M 072 /44            7
 156                MCW   IDDLY,DCNTI        DISK DELAY COUNT                     7  0380  M 075 656            8
 157         *
 158         * CALCULATE TAPE WRITE ADDRESSES FROM RECORD LENGTHS
 159         *
 160                B     GETOFF             CALULATE OFFSET = - I3LEN            4  0387  B 917                8
 161                DSA   I3LEN              TAPE 3 RECORD LENGTH                 3  0393  004                  8
 162                DSA   TAPE3W&6           TAPE 3 WRITE INSTRUCTION             3  0396  |46                  8
 163                B     GETOFF             CALULATE OFFSET = - I4LEN            4  0397  B 917                8
 164                DSA   I4LEN              TAPE 4 RECORD LENGTH                 3  0403  021                  8
 165                DSA   TAPE4W&6           TAPE 4 WRITE INSTRUCTION             3  0406  |74                  8
 166                B     GETOFF             CALULATE OFFSET = - I5LEN            4  0407  B 917                9
 167                DSA   I5LEN              TAPE 5 RECORD LENGTH                 3  0413  038                  9
 168                DSA   TAPE5W&6           TAPE 5 WRITE INSTRUCTION             3  0416  /02                  9
 169                B     GETOFF             CALULATE OFFSET = - I6LEN            4  0417  B 917                9
 170                DSA   I6LEN              TAPE 6 RECORD LENGTH                 3  0423  055                  9
 171                DSA   TAPE6W&6           TAPE 6 WRITE INSTRUCTION             3  0426  /30                  9
 172         *
 173                SW    1                                                       4  0427  , 001                9
 174                BCE   *&8,IDPSW,         IS IDPSW BLANK?                      8  0431  B 446 080           10
 175                CW    DISKB              TURN ON DISK ADDRESS PRINTING        4  0439  ) 585               10
 176         *
 177                B     RDIMAG             READ AND STORE THE IMAGE             4  0443  B 659               10
 178         *
 179         * EVENT LOOP -- CHECK SWITCHES TO DETERMINE ACTIONS
 180         *
 181         SWLOOP BSS   PRINT,C            D-MOD CHANGED BY PRINT TO BLANK      5  0447  B 705 C             10
 182                BSS   DISK,B             EXERCISE 1311                        5  0452  B 497 B             10
 183                BSS   TAPEX,D            EXERCISE TAPE 3                      5  0457  B 763 D             10
 184                NOP   T3PAKT                                                  4  0462  N |31               10
 185                BSS   TAPEX,E            EXERCISE TAPE 4                      5  0466  B 763 E             11
 186                NOP   T4PAKT                                                  4  0471  N |59               11
 187                BSS   TAPEX,F            EXERCISE TAPE 5                      5  0475  B 763 F             11
 188                NOP   T5PAKT                                                  4  0480  N |87               11
 189                BSS   TAPEX,G            EXERCISE TAPE 6                      5  0484  B 763 G             11
 190                NOP   T6PAKT                                                  4  0489  N /15               11
 191                B     SWLOOP                                                  4  0493  B 447               11
```

```
SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

                   JOB   HZG DEMO -- 1311 DISK EXERCISER
            *
            * 1311 DISK EXERCISER
            *
            DISK   SBR   DISKX&3                                                4  0497  H 625                12
                   BWZ   DISKA,DCOUNT,K     IS THE COUNT NEGATIVE?              8  0501  V 520 658 K          12
                   S     KP1,DCOUNT         SUBTRACT ONE FROM THE COUNT         7  0509  S 082 658            12
                   B     DISKX              GO TO SUBR EXIT                     4  0516  B 622                12
            DISKA  LCA   DK2,DMUL           A CRUDE MULTIPLICATIVE RNG          7  0520  L 636 629            12
                   M     DFAC,DPROD                                             7  0527  @ 638 632            12
                   MCW   DPROD,DK2                                              7  0534  M 632 636            13
                   LCA   KONE,DADDR1                                            7  0541  L 654 643            13
                   MCW   DK1,DADDR1                                             7  0548  M 634 643            13
                   A     DADDR1                                                 4  0555  A 643                13
                   MCW   KONE,DADDR2                                            7  0559  M 654 648            13
                   MCW   %F0,DADDR,R        SEEK DISK                           8  0566  M %F0 639 R          14
                   MCW   DCNTI,DCOUNT                                           7  0574  M 656 658            14
                   B     DISKX              SKIP PRINTING DISK ADDRESSES        4  0581  B 622                14
            DISKB  DCW   @}@                GM WITHOUT WM TURNS OFF BRANCH      1  0585            GMARK      14
                   MCW   DK1,200&X2         MOVE DISK ADDRESS TO PRINT AREA     7  0586  M 634 2!0            14
                   BCE   DISKW,X2-2,1       INDEX HIGH-ORDER DIGHT 1?           8  0593  B 605 092 1          14
                   B     DISKY              NO                                  4  0601  B 615                14
            DISKW  W                        YES, WRITE THE ADDRESSES            1  0605  2                    15
                   CS                                                           1  0606  /                    15
                   CS                                                           1  0607  /                    15
                   SBR   X2,0               CLEAR INDEX                         7  0608  H 094 000            15
            DISKY  SBR   X2,10&X2           ADD TEN TO INDEX                    7  0615  H 094 0J0            15
            DISKX  B     0                                                      4  0622  B 000                15
            *
            DMUL   DCW   0000                                                   4  0629                       15
            DPROD  DC    000                                                    3  0632                       15
            DK1    DCW   91                                                     2  0634                       16
            DK2    DC    57                                                     2  0636                       16
            DFAC   DCW   83                                                     2  0638                       16
            DADDR  DC    @*@                                                    1  0639                       16
            DADDR1 DC    0000                                                   4  0643                       16
            DADDR2 DC    00001                                                  5  0648                       16
            KZERO  DCW   000                CONSTANT ZERO                       3  0651                       16
            KONE   DCW   001                                                    3  0654                       16
            DCNTI  DCW   00                 INITIAL DISK DELAY COUNT            2  0656                       16
            DCOUNT DCW   01                 CURRENT DISK DELAY COUNT            2  0658                       16
```



```
SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

                   JOB   HZG DEMO -- PRINT THE PICTURE
            *
            * READ THE IMAGE AND STORE IT.  THE FIRST CHARACTER AFTER THE LAST
            * ONE IN THE STORAGE AREA WILL BE A RECORD MARK.
            *
            RDIMAG SBR   RDEXIT&3                                               4  0659  H 704                17
            RLOOP  R                                                            1  0663  1                    17
                   LCA   81,IMAGE&X1        STORE ONE LINE OF THE IMAGE         7  0664  L 081 /U9            17
                   B     GOTEM,A            DONE?                               5  0671  B 687 A              17
                   SBR   X1,80&X1           ADD 80 TO X1                        7  0676  H 089 0Y0            17
                   B     RLOOP              GET ANOTHER ONE                     4  0683  B 663                17
            *
            GOTEM  SBR   X1,80              RESET X1 TO 80                      7  0687  H 089 080            17
                   CS    332                                                    4  0694  / 332                18
                   CS                                                           1  0698  /                    18
                   CC    1                                                      2  0699  F 1                  18
            RDEXIT H     0                  WAIT FOR THE SWITCHES TO BE SET     4  0701  . 000                18
            *
            * PRINT THE PICTURE
            *
            PRINT  SBR   PRINTX&3                                               4  0705  H 762                18
                   MCW   KB,SWLOOP&4        MAKE ENTRY TEST UNCONDITIONAL       7  0709  M 083 451            18
                   LCA   IMAGE&X1,306                                           7  0716  L /U9 306            18
                   W                                                            1  0723  2                    19
                   B     PRINTA,IMAGE&1&X1,'  LAST IMAGE?                       8  0724  B 743 /V0 '          19
                   SBR   X1,80&X1           ADD 80 TO X1                        7  0732  H 089 0Y0            19
                   B     PRINTX                                                 4  0739  B 759                19
            PRINTA SBR   X1,80              RESET X1 TO 80                      7  0743  H 089 080            19
                   CC    1                                                      2  0750  F 1                  19
                   MCW   KC,SWLOOP&4        CHANGE ENTRY TEST TO BSS C          7  0752  M 084 451            19
            PRINTX B     0                                                      4  0759  B 000                20
```

```
                    HZG DEMO -- TAPE EXERCISER                                    SGSVU            PAGE    5

SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

264                JOB   HZG DEMO -- TAPE EXERCISER
265         *
266         * TAPE EXERCISER PACKET LAYOUT
267         *
268         TWMAX  EQU   2&X3    NUMBER OF RECORDS INITIAL VALUE                   0002 X
269         TPMAX  EQU   5&X3    PROCESSING DELAY INITIAL VALUE                    0005 X
270         TRDLY  EQU   10&X3   REWIND DELAY INITIAL VALUE                        0010 X
271         TWRIT  EQU   18&X3   TAPE WRITE INSTRUCTION LAST CHAR                  0018 X
272         TPCNT  EQU   20&X3   CURRENT PROCESSING DELAY COUNT                    0020 X
273         TWCNT  EQU   23&X3   CURRENT RECORDS UNTIL REWIND                      0023 X
274         TRCNT  EQU   27&X3   CURRENT REWIND DELAY COUNT                        0027 X
275         *
276         * TAPE EXERCISER.  FOLLOW  B TAPEX  WITH  NOP PACKET
277         *
278         TAPEX  SBR   TAPEXX&3                                           4  0763  H 893              21
279                SBR   X3                                                 4  0767  H 099              21
280                MCW   4&X3,X3           ADDRESS OF PACKET TO X3          7  0771  M 0?4 099          21
281                BWZ   TAPEXA,TRCNT,K    ENOUGH REWIND DELAY?             8  0778  V 797 0B7 K        21
282                S     KP1,TRCNT                                          7  0786  S 082 0B7          21
283                B     TAPEXX                                             4  0793  B 890              21
284         TAPEXA C     KONE,TPCNT        ENOUGH PROCESSING DELAY?         7  0797  C 654 0B0          22
285                BE    TAPEXB                                             5  0804  B 827 S            22
286                S     KP1,TPCNT         DECR PROCESSING DELAY COUNT      7  0809  S 082 0B0          22
287                MZ    KZERO,TPCNT                                        7  0816  Y 651 0B0          22
288                B     TAPEXX                                             4  0823  B 890              22
289         TAPEXB LCA   TRDLY,TRCNT       RWD DELAY DEPENDING ON REC CNT   7  0827  L 0A0 0B7          22
290                BWZ   TAPEXE,TWCNT,K    TIME TO REWIND?                  8  0834  V 894 0B3 K        23
291                LCA   RDELAY,TRCNT      DELAY FOR FULL REEL REWIND       7  0842  L /44 0B7          23
292                BEF   TAPEXE                                             5  0849  B 894 K            23
293                LCA   KM1,TRCNT         SET FOR NO REWIND DELAY          7  0854  L /48 0B7          23
294                MCW   TWRIT,*&8         COPY TAPE WRITE INSTRUCTION      7  0861  M 0A8 875          23
295                WT    3,GMWM                                             8  0868  M %U3 100 W        24
296                S     KP1,TWCNT         DECREMENT WRITE COUNTER          7  0876  S 082 0B3          24
297                MCW   TPMAX,TPCNT       STORE PROCESSING DELAY           7  0883  M 0?5 0B0          24
298         TAPEXX B     0                                                  4  0890  B 000              24
299         TAPEXE MN    TWRIT-4,*&4       SET DRIVE NUMBER IN REWIND       7  0894  D 0A4 904          24
300                RWD   3                                                  5  0901  U %U3 R            24
301                MCW   TWMAX,TWCNT       RE-INITIALIZE WRITE COUNT        7  0906  M 0?2 0B3          25
302                B     TAPEXX                                             4  0913  B 890              25
303         *
304         * OFFSET THE TAPE WRITE ADDRESS, GIVEN THE RECORD LENGTH
305         * DO THIS BY MA-ING THE 16000-COMPLEMENT OF THE RECORD
306         * LENGTH TO THE ADDRESS IN THE TAPE WRITE INSTRUCTION
307         *
308         GETOFF SBR   X3                                                 4  0917  H 099              25
309                SBR   GETXX&3,6&X3                                       7  0921  H |11 0?6          25
310                LCA   P16K,ROFF         START WITH 16001                 7  0928  L |28 |20          25
311                MCW   2&X3,*&4          ADDRESS OF RECORD LENGTH         7  0935  M 0?2 945          25
312                S     0,ROFF            DECREASE BY RECORD LENGTH        7  0942  S 000 |20          26
313                MZ    KZERO,ROFF        CLEAR ZONE                       7  0949  Y 651 |20          26
```

```
                    HZG DEMO -- TAPE EXERCISER                                    SGSVU            PAGE    6

SEQ PG LIN  LABEL  OP    OPERANDS                                          SFX CT  LOCN  INSTRUCTION TYPE  CARD

314         GETL   S     KP1,RTHOU                                          7  0956  S 082 |17          26
315                BWZ   GETX,RTHOU,K      DONE?                            8  0963  V 982 |17 K        26
316                MA    K1000,ROFF        ADD 1000 TO OFFSET               7  0971  # |23 |20          26
317                B     GETL                                               4  0978  B 956              27
318         GETX   MCW   5&X3,X3           ADDRESS OF TAPE WRITE            7  0982  M 0?5 099          27
319                CS    0                 GET LAST ADDRESS TO B REG        4  0989  / 000              27
320                LCA   GMWM              GMWM TO TOP OF MEMORY            4  0993  L 100              27
321                SBR   0&X3              LAST ADDRESS IN MEMORY - 1       4  0997  H 0?0              27
322                MA    ROFF,0&X3         SUBTRACT RECORD LENGTH           7  1001  # |20 0?0          27
323         GETXX  B     0                                                  4  1008  B 000              27
324         *
325         RLEN   DCW   0000              RECORD LENGTH                    4  1015                     28
326         RTHOU  DCW   00                THOUSANDS PART OF OFFSET         2  1017                     28
327         ROFF   DC    000               OFFSET TO TAPE ADDRESS = - RLEN  3  1020                     28
328         K1000  DSA   1000              ADDRESS CONSTANT 1000            3  1023  |00                28
329         P16K   DCW   16001                                              5  1028                     28
330         *
331         * TAPE EXERCISER CONTROL PACKETS
332         *
333         T3PAKT DCW   000     NUMBER OF RECORDS INITIAL VALUE            3  1031                     28
334                DC    #1      FILLER FROM CONTROL CARD                   1  1032                     28
335                DCW   00      PROCESSING DELAY INITIAL VALUE             2  1034                     28
336                DC    #1      FILLER FROM CONTROL CARD                   1  1035                     28
337         T3RDLY DCW   0000    REWIND DELAY INITIAL VALUE                 4  1039                     28
338         TAPE3W WT    3,0     TAPE WRITE INSTRUCTION                     8  1040  M %U3 000 W        29
339                DCW   00      CURRENT PROCESSING DELAY COUNT             2  1049                     29
340                DCW   000     CURRENT RECORDS UNTIL REWIND               3  1052                     29
341                DCW   -0001   CURRENT REWIND DELAY COUNT                 4  1056                     29
342         *
343         T4PAKT DCW   000     NUMBER OF RECORDS INITIAL VALUE            3  1059                     29
344                DC    #1      FILLER FROM CONTROL CARD                   1  1060                     29
345                DCW   00      PROCESSING DELAY INITIAL VALUE             2  1062                     29
346                DC    #1      FILLER FROM CONTROL CARD                   1  1063                     29
347         T4RDLY DCW   0000    REWIND DELAY INITIAL VALUE                 4  1067                     29
348         TAPE4W WT    4,0     TAPE WRITE INSTRUCTION                     8  1068  M %U4 000 W        30
349                DCW   00      CURRENT PROCESSING DELAY COUNT             2  1077                     30
350                DCW   000     CURRENT RECORDS UNTIL REWIND               3  1080                     30
351                DCW   -0001   CURRENT REWIND DELAY COUNT                 4  1084                     30
352         *
353         T5PAKT DCW   000     NUMBER OF RECORDS INITIAL VALUE            3  1087                     30
354                DC    #1      FILLER FROM CONTROL CARD                   1  1088                     30
355                DCW   00      PROCESSING DELAY INITIAL VALUE             2  1090                     30
356                DC    #1      FILLER FROM CONTROL CARD                   1  1091                     30
357         T5RDLY DCW   0000    REWIND DELAY INITIAL VALUE                 4  1095                     30
358         TAPE5W WT    5,0     TAPE WRITE INSTRUCTION                     8  1096  M %U5 000 W        31
359                DCW   00      CURRENT PROCESSING DELAY COUNT             2  1105                     31
360                DCW   000     CURRENT RECORDS UNTIL REWIND               3  1108                     31
361                DCW   -0001   CURRENT REWIND DELAY COUNT                 4  1112                     31
362         *
363         T6PAKT DCW   000     NUMBER OF RECORDS INITIAL VALUE            3  1115                     31
```

```
SEQ PG LIN  LABEL   OP    OPERANDS                                         SFX CT  LOCN  INSTRUCTION TYPE  CARD

 364                DC    #1      FILLER FROM CONTROL CARD                      1  1116                     31
 365                DCW   00      PROCESSING DELAY INITIAL VALUE                2  1118                     31
 366                DC    #1      FILLER FROM CONTROL CARD                      1  1119                     31
 367         T6RDLY DCW   0000    REWIND DELAY INITIAL VALUE                    4  1123                     31
 368         TAPE6W WT    6,0     TAPE WRITE INSTRUCTION                        8  1124  M %U6 000 W        32
 369                DCW   00      CURRENT PROCESSING DELAY COUNT                2  1133                     32
 370                DCW   000     CURRENT RECORDS UNTIL REWIND                  3  1136                     32
 371                DCW   -0001   CURRENT REWIND DELAY COUNT                    4  1140                     32
 372        *
 373         RDELAY DCW   0000    DELAY COUNTER FOR EOT REWINDS                 4  1144                     32
 374         KM1    DCW   -0001   CONSTANT -1                                   4  1148                     32
 375        *
 376         IMAGE  DS    1       STORAGE FOR IMAGE STARTS HERE                    1149
 377                END   START                                                          / 336 080
```



```
SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS  SYMBOL  ADDRESS
DADDR      639   DADDR1     643   DADDR2     648   DCNTI      656   DCOUNT     658   DFAC       638   DISK       497
DISKA      520   DISKB      585   DISKW      605   DISKX      622   DISKY      615   DK1        634   DK2        636
DMUL       629   DPROD      632   GETL       956   GETOFF     917   GETX       982   GETXX     1008   GMWM       100
GOTEM      687   I3LEN        4   I3PMAX      11   I3RDLY      16   I3WMAX       8   I4LEN       21   I4PMAX      28
I4RDLY      33   I4WMAX      25   I5LEN       38   I5PMAX      45   I5RDLY      50   I5WMAX      42   I6LEN       55
I6PMAX      62   I6RDLY      67   I6WMAX      59   IDDLY       75   IDPSW       80   IMAGE     1149   IRDLY       72
K1000     1023   KB          83   KC          84   KM1       1148   KONE       654   KP1         82   KZERO      651
P16K      1028   PRINT      705   PRINTA     743   PRINTX     759   RDELAY    1144   RDEXIT     701   RDIMAG     659
RLEN      1015   RLOOP      663   ROFF      1020   RTHOU     1017   START      336   SWLOOP     447   T3PAKT    1031
T3RDLY    1039   T4PAKT    1059   T4RDLY    1067   T5PAKT    1087   T5RDLY    1095   T6PAKT    1115   T6RDLY    1123
TAPE3W    1040   TAPE4W    1068   TAPE5W    1096   TAPE6W    1124   TAPEX      763   TAPEXA     797   TAPEXB     827
TAPEXE     894   TAPEXX     890   TPCNT    20+X3   TPMAX     5+X3   TRCNT    27+X3   TRDLY    10+X3   TWCNT    23+X3
TWMAX     2+X3   TWRIT    18+X3   X1          89   X2          94   X3          99
```