				ehlde
020	023	353		call * wrT Lines
		315 ←		
		326		
		001		
		341		Pop hl
		015		C-1
		310		rz
		303		Jmp * exchange
030		007		
		023		
		000		nop
		000		
		041	* End	hl= * end msg
		044		
		023		
		315 ←		Call * wrT Lines
040		326		
		001		
		311		reT
		000		nop
		252 *	* end msg	
		252 *		
		305 E		
		316 N		
050		304 D		
	1	252 *		
	2	252 *		
	3	215 cr		
	4	000		
	5	006	* addr1	
	6	000		
	7	004	* addr2	
060		176		a=m
		043		hl+1
		376		i-a 230
		230 Ω		
		330		rc
		303		Jmp addr2
		057		
		023		
070		032	* addr3	a=(de)
		167		m=a
		267		a or a
		310		rz
		043		hl+1
		023		de+1
		303		Jmp addr3
		070		

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```
100  023     023
             000                  nop
             176    * addr 4      a = m
             267                  a or a
             310                  rz
             022                  (de) = a
             053                  hl - 1
             033                  de -1
110          303                  Jmp  * addr 4
             102
             023
             006    * addr 5      b = '000
             000
             053                  hl - 1
             053    * addr 6      hl - 1
             004                  b + 1
120          176                  a = m
             376                  i-a  230
             230    ↩
             322                  Jnc * addr 6
             116
             023
             043                  hl + 1
             311                  rcT
130          043    * addr 7      hl + 1
             005                  b - 1
             310                  rz
             303                  Jmp  * addr 7
             130
             023
             053    * addr 8      hl - 1
             005                  b - 1
140          310                  rz
             303                  Jmp * addr 8
             136
             023
             000                  nop
             000
             000
             000                  nop
150  ed      315  ←  (editor)     Call * clr TV
             343
             000
             315  ←               Call * LSAA
             100
             010
             042                  ():hl * beg_ed
             250
```

```
160  023    023
            315          Call * addr4a
            030
            024
            041          * addrg 9   hl= * addr5a
            042
            024
            315 ←        Call * wrT Lines
170         326
            001
            052          hl=() * beg-ed
            250
            023
            000          nop
            000
            000          nop
200         315 ←        Call * KBd in
            000
            002
            000          nop
            376          i-a ' 341   (a)
            341  a
            314          C z
            307          * rsTO      rST 000
210         023          de + 1
            376          i-a ' 311   (I)
            311  I
            314          C z
            045          h - 1
            024          d + 1
            376          i-a ' 240   (sp)
            240  sp
220         314          C z
            340          rp o
            023          de + 1
            376          i-a ' 304   (O)
            304  P
            314          C z
            133          e = e
            024          d + 1
230         376          i-a ' 342   (b)
            342  b
            314          C z
            370          rm
            023          de + 1
            376          i-a ' 233   (←)
            233  ←
            312 ←        JZ      op mon1
```

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```
240  023     000
             006
             303          Jmp * addr9
             164
             023
             000          nop
             000
             000
250          000          * beg      nop
 1           030
 2           011          * beg1     hl + bc
 3           031                     hl + de
 4           000          * beg2
 5           040
 6           041          * enter    hl = * Ent msg
 7           273
260          023
             315 ←                   Call * wrt lines
             326
             001
             315 ←                   Call * load Buffer
             320
             004
             315 ←                   Call * Code 2
270          135
             002
             311                     ret
             305  E       * Ent msg
             316  N
             324  T
             305  E
             322  R
300          240  sp
             314  L
             311  I
             316  N
             305  E
             215  cr
             000                     nop
             315  * enter2          Call * enter
310          256
             023
             052                     hl = () * beg1
             252
             023
             021 ←                   de = * Code
             137
             004
```

320	023	032	a = (de)
		376	i - a \ 215 (cr)
		215	
		310	rz
		315 ←	call * a=de
		330	
		004	
		043	hl+7
330		042	():hl * beg1
		252	
		023	
		066	m= '000
		000	
		303	Jmp * enter2
		307	
		023	
340		042	():hl * beg2
		254	
		023	
		345	psh hl
		042	():hl * beg2
		254	
		023	
		315	call * addr1
350		055	
		023	
		042	():hl * Beg-ed
		250	
		023	
		341	pop hl
		005	b-1
		312	Jz * end
360		034	
		023	
		315	call * clr
		000	
		023	
		311	reT
		000	nop
		000	nop
370		315	call * addr5
		113	
		023	
		005	b-1
		312	Jz begin
		006	
		024	
		042	():hl * beg-ed

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```
000  024    250      * addr3a
            023
            315              call * clr
            000
            023
            311              reT
            041      * begin hl= * beg msg
            015
010         024
            315 <            Call * wrT lines
            326
            001
            311              reT
            252 *    *  Beg msg
            252 *
            302 B
020         305 E
            307 G
            311 I
            316 N
            252 *
            252 *
            215 cr
            000              nop
030         176      * addr4a a=m
            042              ():hl * begl
            252
            023
            267              a or a
            310              rz
            043              hl+1
            303              Jmp * addr4a
040         030
            024
            277      * addr5a a-a
            215              a+1+c
            000              nop
            315              Call * enter
            256
            023
050         041 <            hl= * Code
            137
            004
            315              Call * addr1
            055
            023
            052              hl=() * begl
            252
```

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060	024	023	
		345	
		315	
		130	
		023	
		042	
		252	
		023	
070		066	
		000	
		053	
		353	
		052	
		250	
		023	
		053	
100		066	
		000	
		341	
		053	
		315	
		102	
		023	
		000	
110		066	
		215	
		043	
		021	←
		137	
		004	
		315	←
		330	
120		004	
		303	
		152	
		024	
		000	
		000	
		000	
		000	
130		000	
		000	
		000	
		052	
		254	
		023	
		345	
		315	

0068

```
psh hl
Call * addr7

()=hl * beg1

m = '000

hl-1
ehlde
hl=() beg-ed

hl-1
m = '000

pop hl
hl-1
Call * addr4

nop
m = '015 (cr)

hl+1
de = * Code

Call * a=de

Imp * addrba

nop

nop
hl=() * beg2

Psh hl
Call * addr1
```

```
140  024    055
                023
                353
                341
                315
                070
                023
                042
150             252
                023
                052
                254
                023
                042
                250
                023
160             315
                000
                023
                311
                000
                041  <-
                137
                004
170             042
                374
                024
                041
                000
                024
                042
                376
200             024
                041
                373
                024
                066
                000
                021
                000
210             000
                052
                376
                024
                056
                000
                044
                016
```

```
                    ehlde
                    pop hl
                    Call * addr 3

                    ()=hl * beg1

* addr6a            hl=() * beg2

                    ():hl * beg-cd

                    Call * clr

                    reT
                    nop
                    hl=*    addr Code

                    ():hl*  Buff

                    hl=*    addr3a

                    ():hl*  Save

                    hl=*    entries

                    m= `000

* ReseT P/F         de = 000 000

* TesT Page         hl=()   Save

                    l = `000

                    h+1
                    c= `000
```

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```
220  024   000
           174
           376
      (sp) 110
           312
           266
           024
           176   * NXT-BYT   a=m
230                 015      c-1
           312               JZ * Found Zero Page
           254
           024
           043               hl+1
           042               ()=hl *  Save
           376
           024
240                 267      a or a
           312               JZ * NXT BYT
           227
           024
           173               a=e
           267               a or a
           302               JNZ * Page To Buff
           300
250                 024
           303               Jmp * Test Page...
           211
           024
           173   * found zero Page a=e
           267               a or a
           302               JNZ * Contigious
           262
260                 024
           124               d=h
           034   * Contigious e+1
           303               Jmp * Test Page
           211
           024
           041   * Done      hl=* entries
           373
270                 024
           066               m='007
           007
           173               a=e
           267               a or a
           312               JZ write Buff
           362
           024
```

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```
300  024   376        *          i-a ` 002
           002
           332                   JC  *  Single Page
           321
           024
           172                   a=d
           203                   a+e
           075                   a-1
310        137                   e=a
           325                   psh de
           036                   e=  ` 255
           255
           315                   Call * D To Buff
           331
           024
           321                   pop bc
320        123                   d=e
           036        * Single Page  e=  ` 240
           240
           315                   Call * D To Buff
           331
           024
           303                   Jmp * ReseT P/F
           206
330        024
           172        * D To Buff  a=d
           052                   hl=() *  Buff
           374
           024
           315 <                 Call * Bin-To-Ascii
           225
           001
340        043                   hl+1
           043                   hl+1
           043                   hl+1
           163                   m=e
           043                   hl+1
           042                   ()=hl * Buff
           374
           024
350        066                   m=  ` 215   (cr)
           215
           041                   hl=*  entries
           373
           024
           064                   m+1
           176                   a=m
           376                   i-a`  010
```

```
360 024     010
            300
            041 <
            137
            004
            315 <
            326
            001
370         303 <
            000
            006
            007      *  entries
            147      *  Buff
            004
            363      *  Save
377 024     107
000 025     041      Tracer
            342
            025
            041
            253
            026
            041
            074
010         027
            041
            075
            027
            041
            034
            025
            315 <
020         326
            001
            315 <
            045
            003
            174
            062
            074
030         027
            303
            056
            025
            324      T
            322      R
            301      A
            303      C
```

rnz
hl= ~~write Buff~~ Code

call * wrT lines

Jmp op mon1

* Add Msg

hl = * op Code

hl = * RegL

hl = * Page

hl = *Pc

hl = *add msg

call * wrT lines

Call * inp Addr

a = h
() = a * Page

Jmp * NXTI2

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```
040  025     305   E
             337   ___
             301   A
             304   D
             304   D
             322   R
             277   ?
             203
050          315                 * entry      Call * Sav Reg
             175
             026
             052                 * NXT ins    hl=()  * Pc
             075
             027
             042                 * NXT 12     ()=h *   Pc
             075
060          027
             042                              ()=h *   Pcs
             077
             027
             257                              a xor a
             062                              ()=a * call F
             101
             027
070          176                              a=m
             062                              ()=a *   op code
             342
             025
             107                              b=a
             026                              d='000
             000
             376                              i-a `303    (c)
100          303
             312                              JZ * Jump
             130
             025
             376                              i-a `315    (m)
             315
             312                              JZ * call
             131
110          025
             346                              a b `307
             307
             376                              i-a `302    (b)
             302
             312                              JZ * Jump
             130
             025
```

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120	025	376		i-a ` 304 (d)
		304		
		302		Jnz * NOXFR
		306		
		025		
		303		Jump * Call
		131		
		025		
130		024	* Jump	d+1
		024	* Call	d+1
		041		hl= * CallF
		101		
		027		
		162		m=d
		016		C= `003
		003		
140		315		Call * SeT Codes
		123		
		026		
		315		Call * display
		263		
		026		
		041		hl= *opc1
		162		
150		025		
		315		Call * op Jump
		262		
		025		
		312		Jz * Jc0
		165		
		025		
		315		Call * flags
160		251		
		025		
		303	* opc1	Jmp *
		053		
		025		
		052	* Jc0	hl=() *oprnd
		343		
		025		
170		016		C= `000
		000		
		072		a=() * Page
		074		
		027		
		274		h-a
		312		Jz * Jc1
		202		

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200	025	025		
		014		C + 1
		072		a = () * call F
		101		
		027		
		075		a - 1
		302		JNZ * JC3
		231		
210		025		
		052		hl = () * Pc
		075		
		027		
		345		psh hl
		015		C - 1
		302		Jnz * JC2
		230		
220		625		
		041		hl = * entry
		050		
		025		
		343		ehl (sp)
		042		()=hl * Pc
		075		
		027		
230		014	* JC2	C + 1
		052	* JC3	hl = () * oprnd
		343		
		025		
		015		C - 1
		302		Jnz * NXTI2
		056		
		025		
240		042		()=hl * JA
		247		
		025		
		315		Call * Res Reg
		224		
		026		
		303		Jump * 1000
		000	* JA	
250		000		
		052	* Flags	hl = () * Rega
		261		
		026		
		134		e = h
		125		d = l
		341		pop hl
		325		psh de

```
260  025   361          Pop af
           351          pc=hl
           072   * opJmp  a=() * op code
           342
           025
           376          i-a `303   (c)
           303
           310          rz
270        376          i-a `311   (I)
           311
           310          rz
           376          i-a `315   (m)
           315
           310          rz
           346          a & `070
           070
300        366          a or `302  (b)
           302
           356          a xor `010
           010
           167          m=a
           311          reT
           170   * NOXFR  a=b
           016          c=`007
310        007
           041          hl= * DicTi
           353
           025
           315          Call * FindByT
           362
           025
           302          Jnz * immins
320        373
           025
           376          i-a `061
           061
           312          JZ * Err
           043
           027
           016          c=`003
330        003
           315   * XEQOp  Call * SetCodes
           123
           026
           315          Call * display
           263
           026
           315          Call * ResReg
```

```
340  025   224
           026
           000      *  op code
           000      *  oprnd
           000      *  oprnd1
           315                 Call  *  Sav Reg
           175
           026
350  025   303                 Jmp *  NXT ins
           053
           025
           001      * DicTi
           021
           041
           042
           052
360  025   062
           072
           276      * FindByT     m-a
           310                   rz
           043                   hl+1
           015                   c-1
           302                   Jnz  *  FindByT
           362
370  025   025
           014                   c+1
           311                   reT
           016      * immins     c= `002
           002
           346                   a & `307
           307
           376                   i-a ` 006
           006
```

```
000  026     006
             312
             331
             025
             376
             302
             332
             031
010          026
             376
             306
             312
             331
             025
             376
             303
020          302
             031
             026
             170
             376
             343
             332
             331
030          025
             016     * onebyT
             001
             376
             307
             312
             043
             027
```

```
Jz * Xeqop

i-a `302    (b)

Jc * onebyT

i-a `306    (f)

Jz * Xeqop

i-a `303    (c)

Jnz  onebyT

a=b
i-a `343    (e)

Jc * Xeqop

c=`001

i-a `307    (g)

Jz *Err
```

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```
040  026   376          i-a `300          (@)
           300
           312          JZ * ReT
           070
           026
           170          a=b
           376          i-a `371          (Y)
           371
050        312          JZ *Err
           043
           027
           376          i-a `311          (I)
           311
           312          JZ * ReT
           070
           026
060        376          i-a `351          (i)
           351
           312          JZ *  Err
           043
           027
           303          Jmp * Xeqop
           331
           025
070        016  * ReT    C= `001
           001
           315          Call * SeTcodes
           123
           026
           315          Call * display
           263
           026
100        041          hl= * opc2
           114
           026
           315          Call * opJmp
           262
           025
           312          JZ * ReT1
           117
110        026
           315          Call * Flags
           251
           025
           303  * opc2  Jmp * NXTins
           053
           025
           341  * ReT1  pophl
```

```
120  026   303          Jmp  *  NXTI2
           056
           025
           041   * Setcodes  hl= *opcode
           342
           025
           160          m=b
           041          hl= `000 000
130        000
           000
           042          ()=hl * oprnd
           343
           025
           052          hl=() * Pc
           075
           027
140        015          c-1
           312          Jz  *  Sc1
           163
           026
           043          hl+1
           176          a=m
           062          ()=a * oprnd1
           343
150        025
           015   * Sc2  c+1
           312          Jz  *  Sc1
           162
           026
           043          hl+1
           176          a=m
           062          ()=hl * oprnd1
160        344
           025
           014   * Sc1  c+1
           014          c+1
           171          a=c
           062          ()=a * NMbYTS
           102
           027
170        043          hl+1
           042          ()=hl * PC
           075
           027
           311   * SavReg  rcT
           345          psh hl
           325          psh de
           305          psh bc
```

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```
200  026    365        psh af
             041        hl = `000 000
             000
             000
             071        hl + sp
             021        de = * Regh
             262
             026
210          016        c = `010
             010
             176   * NXTSAV   a = m
             022              (de) = a
             063              sp + 1
             043              hl + 1
             033              de - 1
             015              c - 1
220          302              Jnz  * NXTSAV
             212
             026
             311              reT
             041   * Res Reg  hl = * `000 000
             000
             000
             071              hl + sp
230          021              de = * Reg L
             253
             026
             016              c = `010
             010
             073   * NXT Res    sp - 1
             053               hl - 1
             032               a = (de)
240          167               m = a
             023               de + 1
             015               c - 1
             302               Jnz  * NXT ReS
             235
             026
             361               pop af
             301               pop bc
250          321               pop de
             341               pop hl
             311                 reT
             000   * Reg L
             000
             000
             000
             000
```

```
260  026    000
               000          * Reg A
               000          * Reg H
               076          * display     a = `377
               377
               315                        Call * char To TV
               372
               000
270            072                        a=() *  Call F
               101
               027
               267                        a or a
               312                        Jz * Disp 0
               305
               026
               041                        hl = *Jc Msg
300            031
               027
               303                        Jmp * Disp 1
               310
               026
               041          * Disp 0      hl = * Ins msg
               016
               027
310            315 <-       * Disp 1      Call * WrT lineS
               326
               001
               072                        a=() * NmbyTs
               102
               027
               117                        C = a
               041 <-                     hl = * Code
320            137
               004
               021                        de = * opcode
               342
               025
               032          * NXTbyT      a = (de)
               315 <-                     Call Bin To ascii
               225
330            001
               043                        hl +1
               043                        hl + 1
               043                        hl + 1
               015                        C - 1
               312                        JZ * Disp2
               347
               026
```

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```
340  026     066                          m = `240      (SP)
             240
             043                          hl + 1
             023                          de + 1
             303                          Jmp  * NXTBYT
             325
             026
             066        * Disp2           m = `214
350          214
             064                          m+1
             041 <                        hl = * wrT buff (code)
             137
             004
             315 <                        Call *wrT lines
             326
             001
360          052                          hl=() * PcS
             077
             027
             315 <                        Call * Dsply-hl
             130
             003
             315                          Call * ResReg
             224
370          026
             042                          hl=() * hL
             072
             027
             041                          hl = * DSPReT
             012
             027
377  026     345                          psh hl
000  027     052                          hl=() * hL
             072
             027
             345                          psh hl
             325                          psh de
             305                          psh bc
             365                          psh af
             303 <                        Jmp  * Dump
010          307
             003
             315        * DSPRET          Call * SAVREG
             175
             026
             311                          reT
             316  N     * insmsG
             330  X
```

```
0020  0027    324    T
              337    |
              311    I
              316    N
              323    S
              273    j
              320    P
              303    C
0030          203    S
              312    J
              325    U
              315    m
              320    P
              257    /
              303    C
              301    a
0040          314    l
              314    l
              203    s
              041      * ERR        hl = * Errmsg
              054
              027
              315 <=                Call * wrT lines
              326
0050          001
              303 <=                Jmp  *op mon1
              000
              006
              323    S      * Errmsg
              320    P
              257    /
              320    P
0060          303    C
              277    ?
              322    R
              323    S
              324    T
              337    |
              311    I
              316    N
0070          323    S
              203    S
              0        * HL =
              0
              0        * Page
              0        * Pc
              0
              0
```

```
100  027     000  *  PCS
             000
             000  *  CALLF
             000    *  NMBYTS
             0
             0
             0
             0
110          0
             0
             0
             0
             0
             0
             0
             0
120          0
             0
             0
             0
             0
             0
             0
             0
130          0
             0
             0
             0
             0
             0
             0
             0
140          0
             0
             0
             0
             0
             0
             0
             0
150          0
             0
             0
             0
             0
             0
             0
             0
```

42.381 50 SHEETS 5 SQUARE
42.382 100 SHEETS 5 SQUARE
42.389 200 SHEETS 5 SQUARE
NATIONAL

160 027 0
0
0
0
0
0
6
0
170 0
0
0
0
0
0
0
0
200 0
0
0
0
0
0
0
0
210 0
0
0
0
0
0
0
0
220 0
0
0
0
0
0
0
0
230 0
0
0
0
0
0
0
0

42 381 50 SHEETS 5 SQUARE
42 382 100 SHEETS 5 SQUARE
42 389 200 SHEETS 5 SQUARE
NATIONAL

240 027

250

260

270

300

310

42 381 50 SHEETS 5 SQUARE
42 382 100 SHEETS 5 SQUARE
42 389 200 SHEETS 5 SQUARE
NATIONAL

320 027 0
0
0
0
0
0
0
0
330 0
0
0
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0
0
0
340 0
0
0
0
0
0
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350 0
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0
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360 0
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0
0
0
370 0
0
0
0
0
0
0
0

42 381 50 SHEETS 5 SQUARE
42 382 100 SHEETS 5 SQUARE
42 389 200 SHEETS 5 SQUARE
NATIONAL