```
DATA
                                   :00
126 EC83 QC
                                             Ready if already negative
                                  :EC89
127 EC84 FA89EC
                            JM
                                             Else change sign MACC
128 EC87 E7
                            RST
                                             (make MACC +1)
129 EC88 1B
                            DATA
                                   : 1B
130 ECB9 C9
                    L0E257
                            RET
131
                    **************
132
                    * TEST A FPT VARIABLE *
133
                    **************
134
135
                    * Entry: Variable in MACC.
136
                             Z=1: Variable is zero.
                    * Exit:
137
                             Z=O: Other flags set on exponent byte
                    *
138
                                  of variable.
                    *
139
                    *
                             ABCDEHL preserved.
140
141
                    FTEST
                            PUSH
                                  B
142 EC8A C5
                                  D
                            PUSH
143 EC8B D5
                                  PSW
                            PUSH
144 EC8C F5
                                             Copy MACC to reg A,B,C,D
                                  4
                            RST
145 EC8D E7
                            DATA
                                  : 15
146 EC8E 15
                            MOV
                                  E.A
                                             Exp byte in E
147 EC8F 5F
                            ORA
                                  В
                                             )
148 EC90 BO
                                             ) Check if nr is zero
                            DRA
                                  C
149 EC91 B1
                            DRA
                                  D
                                             )
150 EC92 B2
                            JZ
                                  :EC98
                                             Then quit
151 EC93 CA98EC
                                             Get exp byte
152 EC96 7B
                            MOV
                                  A.E
                                             Set flags on it
                            ORA
                                  A
153 EC97 B7
154 EC98 D1
                            POP
                                  D
                    FTS10
                            MOV
                                  A.D
155 EC99 7A
                            POP
                                  D
156 EC9A D1
                            POP
                                  В
157 EC9B C1
                            RET
158 EC9C C9
159
                    **********
160
                    * RUN basicfunction SCRN *
161
                    *********
162
163
                                            Eval given coord
                                  : E5F3
                    RSCRN
                            CALL
164 EC9D CDF3E5
                            PUSH
                                  В
165 ECAO C5
                                             Y-coord in C
                            MOV
                                  C.A
166 ECA1 4F
                                             Ask colour of dot on screen
                                   5
                            RST
167 ECA2 EF
                                             + size graphics screen
168 ECA3 27
                            DATA
                                   :27
                            POP
                                  R
169 ECA4 C1
                                             Evt run screen error
                                   :E602
                            JC
170 ECA5 DA02E6
                                             Contents screen loc in MACC
                            JMP
                                   :EB7C
171 ECAB C37CEB
172
173
                       _____
174
                    *** LIST HANDLER ***
175
                       ______
176
177
                    * This module lists a program from the textbuffer
178
                    * onto the screen (or into other required direction)
179
180
                    *********
181
                    * LIST A PROGRAM LINE *
182
                    **************
183
184
                    * Entry: BC: Points to start of textline.
185
                    * Exit:
                             BC: Points to start of next line.
186
                             DEHL preserved, AF corrupted.
                    *
187
```

```
188
                                    D
                     SLINE
                              PUSH
189 ECAB D5
                              PUSH
                                    H
190 ECAC E5
                                               Pots to line or
                                    В
                              INX
191 ECAD 03
                                               List line nr
                              CALL
                                    : EFAE
192 ECAE CDAEEF
                              MVI
                                    A.: 0B
193 ECB1 3E0B
                                               Cursor to tab 8
                                    : DB2A
                              CALL
194 ECB3 CD2ADB
                                               List statement
                                    : ECCC
195 ECB6 CDCCEC
                     L0E262
                              CALL
                              LDAX
                                    R
                                               Get next byte
196 ECB9 OA
                              ORA
197 ECBA B7
                                               If no more statements
                              JP
                                    : ECC5
198 ECBB F2C5EC
                                               Else: print ':'
                              CALL
                                    : EFF5
199 ECBE CDF5EF
200 ECC1 3A
                              DATA
                                    :3A
                                               List next statement
                              JMP
                                    : ECB6
201 ECC2 C3B6EC
202 ECC5 CDF5EF
                     L0E263
                              CALL
                                    : EFF5
                                               print car.ret
203 ECCB OD
                              DATA
                                    : OD
                              POP
                                    H
204 ECC9 E1
205 ECCA D1
                              POP
                                    D
                              RET
206 ECCB C9
207
                     ************
208
209
                     * LIST A STATEMENT *
                     *************
210
211
                     * Based on the token in the textbuffer, a particular
212
                     * statement will be printed.
213
                     * At first, the Basiccommand will be printed. The
214
                     * pointers to the particular strings are in a table
215
                       starting at CD8B. The base for the table is CC08;
216
                     * the offset is calculated by TOKEN *3.
217
218
                       The databyte after the stringaddress pointer
219
                     * indicates which list-routine has to be used for
220
                     * the rest of the statement. This byte is a offset
221
                     * for table ECF8.
222
223
                     * Entry: BC: Points to token.
224
                               BC: Points to next statement.
                     * Exit:
225
                               AFDEHL corrupted.
226
                               On stack: Returnaddress from this sub-
                     *
227
                     *
                               routine.
228
                     *
229
                                               Get token
                              LDAX
                                    В
                     SCOM
230 ECCC OA
                              INX
                                               Update pointer
                                    В
231 ECCD 03
                              MOV
                                    E.A
                                               token in E
232 ECCE 5F
                                    D.:00
                              MVI
233 ECCF 1600
                                    H,:CCOB
234 ECD1 2108CC
                              LXI
                                               Startaddr stringtable
                                               ) Add 3* token
                              DAD
                                    D
235 ECD4 19
                                               >
                              DAD
                                    D
236 ECD5 19
                                               ١
237 ECD6 19
                              DAD
                                    D
                              MOV
                                    E.M
                                               Get lobyte stringaddr
238 ECD7 5E
                                    H
239 ECD8 23
                              INX
                              MOV
                                    D, M
                                               Get hibyte stringaddr
240 ECD9 56
                                               Point to data after addr
                              INX
                                    H
241 ECDA 23
                                               Stringaddr in HL
                              XCHG
242 ECDB EB
                                               Get length byte of string
                              MOV
                                    A.M
243 ECDC 7E
                                               Length=0?
                              DRA
                                    Α
244 ECDD B7
                              CALL
                                    : DB32
                                               List Basicomd string
245 ECDE CD32DB
                                               Get data byte after string-
                                    D
                              LDAX
246 ECE1 1A
                                               address
247
                                               If length string =0
                              JZ
                                    : ECEA
248 ECE2 CAEAEC
                              CPI
                                    100
249 ECE5 FE00
```

```
Print space if byte after
250 ECE7 C46BCE
                              CNZ
                                     : CE6B
                                                stringaddr <>0
251
                                                Get data byte (= offset)
                                     D
                      SCM10
                              LDAX
252 ECEA 1A
                              ADD
                                     A
                                                Offset *2
253 ECEB 87
                              MOV
                                                in E
                                     E,A
254 ECEC 5F
                              MVI
                                     D.:00
255 ECED 1600
                                                Startaddr table Listroutines
                              LXI
                                     H. : ECF8
256 ECEF 21F8EC
                              DAD
                                     D
                                                Add offset
257 ECF2 19
258 ECF3 5E
                              MOV
                                     E,M
                                                Get addr in DE
259 ECF4 23
                              INX
                                     H
260 ECF5 56
                              MOV
                                     D, M
                                                Addr routine in HL
                              XCHG
261 ECF6 EB
262 ECF7 E9
                              PCHL
                                                Go to this adress
263
264
                      ***********************
                      * POINTERS LIST HANDLING ROUTINES *
265
                      *************
266
267
                        Table with addresses of listroutines for the
268
                        part of a statement after a token.
269
270
                      * Startaddress table is ECFB. The offset (given
271
                        between brackets) is identical to the data
272
                       byte after the addresses in the table on CD8B.
273
                      *
274
                                                (00)
275 ECFB 3AED
                     L0E355
                              DBL
                                     :ED3A
                                                      nothing more
                                                (01)
                                                      linenr
                              DBL
                                     : ED41
276 ECFA 41ED
277 ECFC 3BED
                              DBL
                                     :ED3B
                                                (02)
                                                      linenr linenr
                                                      (not used)
278
                                                (03)
                                                      unquoted string
                              DBL
                                     : ED44
279 ECFE 44ED
                                                      E (E=expr)
                              DBL
                                     :ED4D
                                                (04)
280 EDOO 4DED
                                                (05)
                                                      E.E
                              DBL
                                     :ED47
281 ED02 47ED
                                                      EE
                                                (06)
282 ED04 56ED
                              DBL
                                     : ED56
                              DBL
                                                (07)
                                                      E.E E
                                     :ED62
283 ED06 62ED
                                                      E,E E,E E
                                                (08)
                              DBL
                                     : ED5C
284 ED08 5CED
                                                      EEEE
285 EDOA 50ED
                              DBL
                                     : ED50
                                                (09)
                              DBL
                                                (AO)
                                                      E
                                     :ED68
286 EDOC 68ED
                                                      liner-linenr
                                                (OB)
                              DBL
                                     :ED7A
287 EDOE 7AED
                                                (OC)
288 ED10 84ED
                              DBL
                                     :ED84
                                                      sound
289 ED12 9BED
                                                (OD)
                                                      noise
                              DBL
                                     2 ED9B
                                                (OE)
                                                      envelope
                              DBL
                                     :EDA4
290 ED14 A4ED
                                                (OF)
                                                      mode
291 ED16 C1ED
                              DBL
                                     :EDC1
                                                      input <string>
                                                (10)
                              DBL
292 ED18 D9ED
                                     :EDD9
                                                (11)
                                                      input/read/dim
                              DBL
                                     : EDEO
293 ED1A EOED
                                                (12)
                                                      (not used [*])
                              DBL
                                     :EDFO
294 ED1C FOED
                                                (13)
                                                      let
                              DBL
                                     : EDFF
295 ED1E FFED
                                                (14)
                                                      if then <E>
                              DBL
                                     : EE09
296 ED20 09EE
                                                      if goto <linenr>
                              DBL
                                     : EE1A
                                                (15)
297 ED22 1AEE
                                                      if then enr>
                                                (16)
                              DBL
                                     : EE25
298 ED24 25EE
                              DBL.
                                     : EE30
                                                (17)
                                                      for to step
299 ED26 30EE
                              DBL
                                     :EE4F
                                                (18)
                                                      next
300 ED28 4FEE
                                   :EE52
                                                      print
                              DBL
                                                (19)
301 ED2A 52EE
                              DBL
                                     : EE66
                                                (1A)
                                                      on goto
302 ED2C 66EE
                                                      on gosub
                              DBL
                                     :EE71
                                                (1B)
303 ED2E 71EE
                              DBL
                                     : EE87
                                                (1C)
                                                      callm
304 ED30 B7EE
                                     : EE94
                                                (1D)
                                                      (not used [*3)
                              DBL
305 ED32 94EE
                              DBL
                                     : D89E
                                                (1E)
                                                      savea/loada
306 ED34 9ED8
307
                       The vectors marked with [*] are no pointers to
308
                       LIST routines.
309
310
```

DATA :FF

```
312 ED37 FF
                            DATA
                                  1FF
313 ED38 FF
                            DATA
                                  : FF
314 ED39 FF
                            DATA
                                 :FF
315
                    ******************
316
                    * LIST NO FURTHER EXPRESSIONS *
317
                    *****************
318
319
                    SCN1
                           RET
320 ED3A C9
321
                    *****************
322
                    * LIST 1 OR 2 LINENUMBERS *
323
                    *************
324
325
                    * SCN2: List 1 line number.
326
327
                     SCN3: List 2 line numbers, separated by space.
                    *
328
                            (This last entry is not used).
329
                    * Exit: BC updated. DE preserved. AFHL corrupted.
330
331
332 ED3B CDAEEF
                   SCN3
                           CALL
                                 : EFAE
                                           List linenr
333 ED3E CD6BCE
                           CALL
                                 : CE6B
                                           Print space
                   SCN2
                           JMP
                                 : EFAE
                                           List linenr
334 ED41 C3AEEF
335
336
                    ***************
                    * LIST UNQUOTED STRING *
337
                    ***************
338
339
340 ED44 C3EDEF
                   SCN5
                           JMP
                                 :EFED
                                           List unquoted string
341
342
                    ***************
                    * LIST <EXPR>.<EXPR> *
343
                   **************
344
345
346
                    * Exit: BC updated, DE preserved, AFHL corrupted.
                    *
347
348 ED47 CDA2EE
                   SCN7
                           CALL
                                 : EEA2
                                           List <expr>
                                           Print ','
349 ED4A CD70CE
                   SCOEX
                           CALL
                                 : CE70
                           JMP
350 ED4D C3A2EE
                   SCN6
                                 : EEA2
                                           List <expr>
351
352
                   *********************
                    * LIST <EXPR> <EXPR> <EXPR> <EXPR> *
353
                   ********************
354
355
356
                    * Exit: BC updated. DE preserved. AFHL corrupted.
357
358 ED50 CDFCEF
                   SCN11
                           CALL
                                 :EFFC
                                           List <expr>: print space
359 ED53 CDFCEF
                   S3EXP
                           CALL
                                 : EFFC
                                           Idem
360 ED56 CDFCEF
                   SCNB
                           CALL
                                 : EFFC
                                           Idem
361 ED59 C3A2EE
                           JMP
                                 : EEA2
                                           List (expr>
362
363
                   ********************
364
                   * LIST <EXPR>,<EXPR> <EXPR>,<EXPR> <EXPR> *
365
                   *************************
366
                   * Exit: BC updated, DE preserved, AFHL corrupted.
367
368
369 ED5C CD47ED
                   SCN10
                           CALL
                                 :ED47
                                           List <expr>,<expr>
370 ED5F CD6BCE
                           CALL
                                 :CE6B
                                           Print space
                   SCN9
371 ED62 CD47ED
                           CALL
                                 :ED47
                                           List <expr>,<expr>
372 ED65 CD6BCE
                   SCSEX
                           CALL
                                 : CE6B
                                           Print space
```

373 ED68 C3A2EE

LOE343

JMP

:EEA2

List (expr)

```
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374
                    ******************
375
                    * LIST <EXPR>, <EXPR>(, <EXPR>) *
376
                    *****************
377
378
                                  :ED47
                                            List <expr>,<expr>
                    SCN12
                            CALL
379 ED6B CD47ED
                                            Get next byte
                    51210
                            LDAX
380 ED6E 0A
                                            Terminator?
                            CPI
                                  :FF
381 ED6F FEFF
                            INX
                                  B
382 ED71 03
                                            Then abort
383 ED72 C8
                            RZ
                            DCX
                                  R
384 ED73 OB
                                            Print ','
                            CALL
                                  : CE70
385 ED74 CD70CE
                                            List (expr>
386 ED77 C3A2EE
                            JMP
                                  :EEA2
387
                    ***************
388
                    * LIST <LINENR>-<LINENR> *
389
                    *********
390
391
                    * Exit: BC updated, DE preserved, AFHL corrupted.
392
393
                                            List linenr
                    SCN13
                            CALL
                                  : EFAE
394 ED7A CDAEEF
                            CALL
                                  :EFF5
                                            Print "-"
395 ED7D CDF5EF
                            DATA
                                  : 2D
396 EDBO 2D
                                            List linenr
                            JMP
                                  : EFAE
397 ED81 C3AEEF
398
                    *************
399
                    * LIST EXPRESSION AFTER 'SOUND' *
400
                    ************
401
402
                    * Exit: BC updated. AFHL corrupted.
403
                            DE: preserved if ON, corrupted if DFF.
404
405
                    SCN14
                            LDAX
                                            Get byte
406 EDB4 OA
                                  B
                                            OFF sign?
                            CPI
                                  :FF
407 ED85 FEFF
                            CNZ
                                  : EFFC
                                            If not: List <expr>, print
408 ED87 C4FCEF
                                            space
409
                            LDAX
                                            Get next byte
                                  R
410 EDBA 0A
                                  :FF
                                            OFF sign?
                            CF I
411 EDBB FEFF
                                            If not: List <expr> <expr>
412 ED8D C250ED
                            JNZ
                                  : ED50
                                            <expr> <expr>; abort
413
                                            Else: print 'OFF'
414 ED90 CD78CE
                    51410
                            CALL
                                  :CE78
                            DBL
                                  :ED97
415 ED93 97ED
                            INX
                                  R
416 ED95 03
417 ED96 C9
                            RET
418
                    * DATA:
419
420
                    L0E354
                            DATA
                                  :03
421 ED97 03
                                  : 4F
                            DATA
                                            0
422 ED98 4F
                                            F
423 ED99 46
                            DATA
                                  : 46
                                            F
                            DATA
424 ED9A 46
                                  : 46
425
426
                    **************
                    * LIST EXPRESSION AFTER 'NOISE' *
427
                    ********************
428
429
                    * Exit: BC updated, E preserved, AFDHL corrupted.
430
431
                    SC14A
                            LDAX
                                            Get 1st byte NCB
                                  R
432 ED9B OA
                            CPI
433 ED9C FEFF
                                  :FF
                                            OFF sign?
```

JZ

JMP

:ED90

:ED56

434 ED9E CA90ED

435 EDA1 C356ED

Then print 'OFF', abort

Else: List <expr> <expr>

```
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436
                  *************
437
                  * LIST EXPRESSION AFTER 'ENVELOPE' *
438
                  ****************
439
440
                  * Exit: BC updated, E preserved, AFDHL corrupted.
441
442
443 EDA4 CDFCEF
                  SCN15
                         CALL : EFFC
                                        List <expr>, print
                                        space
444
                         LDAX B
                                        Get length of expr
445 EDA7 0A
                         INX
                               В
446 EDAB 03
                         MOV D,A
                                       into D
447 EDA9 57
                         DCR
448 EDAA 15
                  S1510
                              D
                                       If ready
                         JM
                              :EDB8
449 EDAB FABBED
                                        List <V>,<T>
                         CALL :ED47
450 EDAE CD47ED
                                        Print ';'
                         CALL : EFF5
451 EDB1 CDF5EF
                         DATA :3B
452 EDB4 3B
                                        Next <V>,<T>
                              : EDAA
453 EDB5 C3AAED
                         JMP
                                        Get last byte of expr
454 EDB8 OA
                  S1520
                         LDAX B
455 EDB9 03
                         INX B
                         CPI :FF
                                        Terminator?
456 EDBA FEFF
                                        Then abort
                         RZ
457 EDBC C8
                         DCX
                              В
458 EDBD OB
                         JMP
                               : EEA2
                                       List <expr>
459 EDBE C3A2EE
460
                  ************
461
                  * LIST EXPRESSION AFTER 'MODE' *
462
                  ************
463
464
                         LDAX B
                                       Get mode byte
                  SCN16
465 EDC1 0A
                         INX
                               В
466 EDC2 03
                              D,:30
                         MVI
467 EDC3 1630
                                        Mode 0 (FF) ?
                         DRA
                               A
468 EDC5 B7
                                        Then print '0'
                         JM
                               :EDD4
469 EDC6 FAD4ED
                                        CY=1 if A-mode
                         RAR
470 EDC9 1F
                  RSA10
                         INR
                               A
471 EDCA 3C
                               PSW
                         PUSH
472 EDCB F5
                              D
                                        Convert to ASCII
                         ADD
473 EDCC 82
                                        Print modenr
                         CALL
                              : DD60
474 EDCD CD60DD
                         POP
                               PSW
475 EDDO F1
                         CMC
476 EDD1 3F
                                       Prepare print 'A'
                         MVI D.:41
477 EDD2 1641
                         MOV A, D
478 EDD4 7A
                  51610
                                       Print 'A' if A-mode
                              : DD60
                         CNC
479 EDD5 D460DD
                         RET
480 EDDB C9
481
                  ***************
482
                  * LIST EXPRESSION AFTER 'INPUT'-'READ'-'DIM' *
483
                  ***************
484
485
                  * Input with string:
486
487
                         CALL
                              : EEA2
                                        List string
488 EDD9 CDAZEE
                  SCN17
                                        Print ';'
                         CALL
                               :EFF5
489 EDDC CDF5EF
                         DATA :3B
490 EDDF 3B
491
                  * Rest:
492
493
                                       Get nr of variables
                         LDAX
                               B
```

B

D

D.A

into D

INX

MOV

PUSH

494 EDEO OA

495 EDE1 03

496 EDE2 57

497 EDE3 D5

SCN18

S1810

```
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```

```
List variable reference
498 EDE4 CDFCEE
                            CALL
                                  : EEFC
                            POP
                                  D
499 EDE7 D1
                                            Decr nr of variables
                            DCR
                                  D
500 EDEB 15
                                            Abort if ready
                            RZ
501 EDE9 C8
                                            Print ','
                            CALL
                                  :CE70
502 EDEA CD70CE
                            JMP
                                  :EDE3
                                            List next variable
503 EDED C3E3ED
504
                    *******************
505
                    * part of RUN 'DIM': CALC. REQD. SPACE *
506
                    ****************
507
508
                                             If length element <= 254:
509 EDFO C28FDE
                    RDM40
                            JNZ
                                  : DEBF
                                             then HL=HL*A
510
                                            Else:
                            MOV
                                  A.H
511 EDF3 7C
                            DRA
                                  A
                                             Set flags on hibyte
512 EDF4 B7
                            MOV
                                  H.L
513 EDF5 65
                                  L,:00
                            MVI
514 EDF6 2E00
                                             Abort if H=0
515 EDF8 C8
                            RZ
                                             Else: CY=1, L into H
                            STC
516 EDF9 37
517 EDFA C9
                            RET
518
                    ***************
519
                    * RUBBISH - (not used) *
520
                    ****************
521
522
                    L0E352
                            DATA
                                  : CE
523 EDFB CE
                                  : C3
                            DATA
524 EDFC C3
                                  :F4
                            DATA
525 EDFD F4
                            DATA
                                  :ED
526 EDFE ED
527
                    *****************
528
                    * LIST EXPRESSION AFTER 'LET' *
529
                    ****************
530
531
                      Entry: BC: Points to assign statement.
532
                             BC updated, AFDEHL corrupted.
533
534
                                             List lefthand variable
                                  : EEFC
                            CALL
                    SCN20
535 EDFF CDFCEE
                                             reference
536
                                             Print '='
                            CALL
                                  :EFF5
537 EE02 CDF5EF
                            DATA
                                  :3D
538 EE05 3D
                                  : EEA2
                                             List righthand expr
                            JMP
539 EE06 C3A2EE
540
                            END
541 EE09
****************
                TABLE *
* S Y M B D L
*****************
                            LOE252 EC23
                                           LOE257 ECB9
                     EC98
FTEST
       EC8A
              FTS10
                                           LOE352 EDFB
                            LOE343 ED68
              LOE263 ECC5
LOE262 ECB6
                                                  EDFO
                            MPT46
                                    EC6D
                                           RDM40
L0E354 ED97
              LOE355 ECF8
                                                  EC27
                                           RRND
                                    EC44
              RPI
                     EC1D
                            RRD10
RPEEK
       EC16
                                           51210
                                                  ED6E
                            RSGN
                                    EC7B
RSA10
       EDCA
              RSCRN
                     EC9D
                                                  EDD4
                                           51610
                            S1520
                                    EDB8
              S1510
                     EDAA
51410
       ED90
                                                  ECEA
                                           SCM10
                            SC14A
                                    ED9B
S1810
       EDE3
              SZEXP
                     ED53
                                    ED50
                                           SCN12
                                                  ED6B
                     ED5C
                            SCN11
SCN1
       ED3A
              SCN10
                                                  EDC1
                                           SCN16
                                    EDA4
SCN13
       ED7A
              SCN14
                     ED84
                            SCN15
                                                  EDFF
                                    ED41
                                           SCN20
SCN17
       EDD9
              SCN18
                     EDEO
                            SCN2
```

SCN7

SCOM

ED4D

ED4A

SCN6

SCOEX

SCN5

SCN9

SCN3

SCNB

ED3B

ED56

ED44

ED62

ED47

ECCC

```
DAI FIRMWARE OEEO9-OEFFF V1.0
                                          Rev. 1
PAGE 01
                                 : EE09
                           ORG
002
003
                    *
004
005
                    ************
006
                    * LIST EXPRESSION AFTER 'IF' (1) *
007
                    ****************
800
009
                    * Lists '<expr> THEN <expr>'.
010
011
                                           List <expr>; print space
                    SCN21
                           CALL
                                 :EFFC
012 EE09 CDFCEF
                                           Print 'THEN'
                                  : CE78
                            CALL
013 EEOC CD78CE
                                  :EE15
                           DBL
                    MPT17
014 EEOF 15EE
                            INX
                                 В
015 EE11 03
                           JMP
                                  : ECCC
                                           List statement
016 EE12 C3CCEC
017
                    * DATA :
018
019
                                  :04
                    L0E350
                           DATA
020 EE15 04
                                            T
                                  :54
                           DATA
021 EE16 54
                            DATA
                                  : 48
                                           н
022 EE17 48
                                  : 45
                                           E
                            DATA
023 EE18 45
                                  : 4E
                                            N
                            DATA
024 EE19 4E
025
                    ************
026
                    * LIST EXPRESSION AFTER 'IF' (2) *
027
                    *******************
028
029
                    * Lists '<expr> GOTO <linenr>'.
030
031
                                  : EFFC
                                            List <expr>; print space
                    SCN22
                            CALL
032 EE1A CDFCEF
                                            Print 'GOTO'
                            CALL
                                  : CE78
033 EE1D CD78CE
                            DBL
                                  : CBF9
034 EE20 F9CB
                            JMP
                                  : EFAE
                                            List linenr
035 EE22 C3AEEF
036
                    ************
037
                    * LIST EXPRESSION AFTER 'IF' (3) *
038
                    *************
039
040
                    Lists '<expr> THEN <linenr>'.
041
042
                                            List <expr>; print space
043 EE25 CDFCEF
                    SC22A
                            CALL
                                  : EFFC
                            CALL
                                  : CE78
                                            Print 'THEN'
044 EE28 CD78CE
                                  :EE15
045 EE2B 15EE
                            DBL
                                            List linenr
046 EE2D C3AEEF
                            JMP
                                  : EFAE
047
                    ****************
048
                    * LIST EXPRESSION AFTER 'FOR' *
049
                    ******************
050
051
                    * Lists '<LET statement> TO <expr> (STEP <expr>)'.
052
053
                                            List expr of LET statement
                                  : EDFF
054 EE30 CDFFED
                    SCN23
                            CALL
055 EE33 CD6BCE
                            CALL
                                  : CE6B
                                            Print space
                                  : CE78
                                            Print 'TO'
056 EE36 CD78CE
                            CALL
                                  : EE4C
                            DBL
057 EE39 4CEE
                            CALL
                                  :EEA2
                                            List (expr)
058 EE3B CDA2EE
                                            Get next byte
059 EE3E 0A
                            LDAX
                                  B
060 EE3F 03
                            INX
                                  B
                            CPI
                                  :FF
                                            Terminator?
061 EE40 FEFF
                                            Then abort
                            RZ
062 EE42 CB
                                            Else:
                            DCX
                                  B
063 EE43 OB
```

```
Print 'STEP'
                                  : CE75
                            CALL
064 EE44 CD75CE
                                  : CD3D
                            DBL
065 EE47 3DCD
                                            List <expr>
                            JMP
                                  : EEA2
066 EE49 C3A2EE
067
                    * DATA:
068
069
                   RLA20
                            DATA
                                  :02
070 EE4C 02
                            DATA
                                  :54
                                            T
071 EE4D 54
                                            0
                                  : 4F
                            DATA
072 EE4E 4F
073
                    ****************
074
                    * LIST EXPRESSION AFTER 'NEXT' *
075
                    ******************
076
077
                            JMP
                                  : EEFC
                                            List var.ref.
                    SCN24
078 EE4F C3FCEE
079
                    *************
080
                    * LIST EXPRESSIONS AFTER 'PRINT' *
081
                    **************
082
083
                                            Get nr of expr
                                  B
084 EE52 OA
                    SCN25
                            LDAX
                            INX
                                  H
085 EE53 03
                            MOV
                                  D.A
                                            into D
086 EE54 57
                    52510
                            DCR
087 EE55 15
                                            Abort if ready
                            RM
088 EE56 FB
                            INX
                                  B
089 EE57 03
                                            List <expr>
                            CALL
                                  :EEA2
090 EE58 CDA2EE
                                            Get next byte
                            LDAX
                                  B
091 EE5B 0A
                            INX
                                  B
092 EE5C 03
                                            Terminator?
                                  :FF
093 EESD FEFF
                            CFI
                                            Then abort
                            RZ
094 EE5F C8
                                            Else: print this byte
                            CALL
                                  : DD60
095 EE60 CD60DD
                                            List next expr
                            JMP
                                  : EE55
096 EE63 C355EE
097
                    **************
098
                    * LIST EXPRESSION AFTER 'ON' (1) *
099
                    **************
100
101
                    * Lists '<expr> GOTO <linenrs>'.
102
                    *
103
                                            List <expr>; print space
                    SCN26
                            CALL
                                  : EFFC
104 EE66 CDFCEF
                                            Print 'GOTO'
                            CALL
                                  : CE78
105 EE69 CD78CE
                                  : CBF9
                            DBL
106 EE6C F9CB
                                            List linenrs
                            JMP
                                  : EE79
107 EE6E C379EE
108
                    *****************
109
                    * LIST EXPRESSION AFTER 'ON' (2) *
110
                    **************
111
112
                    * Lists '<expr> GOSUB <linenrs>'.
113
114
                                            List <expr>; print space
                                  : EFFC
                    SCN27
                            CALL
115 EE71 CDFCEF
                                            Print 'GOSUB'
                                  : CE78
116 EE74 CD78CE
                            CALL
                                  : CCO1
                            DBL
117 EE77 01CC
                                            Get nr of linenrs
                    S2710
                            LDAX
                                  B
118 EE79 OA
                            INX
                                  B
119 EE7A 03
                                            into D
                            MOV
                                  D.A
120 EE7B 57
                                            List linenr
                                  : EFAE
121 EE7C CDAEEF
                    S2720
                            CALL
                            DCR
122 EE7F 15
                                            Abort if ready
                            RZ
123 EEBO CB
                                            Print ','
                            CALL
                                  : CE70
124 EE81 CD70CE
                                  : EE7C
                                            List next linenr
```

JMP

125 EEB4 C37CEE

```
DAI FIRMWARE OEEO9-OEFFF V1.0
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PAGE 03
126
                    *****************
127
                    * LIST EXPRESSION AFTER 'CALLM' *
128
                    ******************
129
                    *
130
131 EE87 CDA2EE
                    SCN28
                            CALL
                                  : EEA2
                                            List <expr>
                                            Print '.': List next expr
                            JMP
                                  : ED6E
132 EEBA C36EED
133
                    ************
134
                    * SET I/O DIRECTION *
135
136
                    *******
137
                    * Part of RESET (C719). Only used for A = 0.
138
                    * Depending on A, the input switch #0296 and
139
                    * the output switch #0131 are set.
140
141
                    * Default DINC is RS232.
142
                                 INSW:
                                             DTSW:
143
                    *
                                             screen/RS232
                            A=0: keyboard
144
145
                    *
                            A=1: DINC
                                             screen
                            A=2: DINC
                                             editbuffer
                    *
146
                    *
                            A=3: DINC
                                             DOUTC
147
148
                                  :0296
                                            Select keyb or DINC
                    MPT02
149 EEBD 329602
                            STA
                                            Select screen/RS232/edit/
                                  :0131
150 EE90 323101
                            STA
                                            DOUTC
151
                            RET
152 EE93 C9
153
                    **********
154
                    * SET VOLUMES *
155
                    **********
156
157
                    * Part of RUN TALK (CD64).
158
159
                                 Farameter code.
                     Entry: A:
160
                             HL: Pointer to volume byte.
161
162
                                            Save pntr to volume
                    RTK40
                            PUSH
                                  H
163 EE94 E5
                            MOV
                                  L,M
                                            Volume in L
164 EE95 6E
                            MVI
                                  H.: OF
165 EE96 260F
                            RAR
                                            Check parameter code
166 EE98 1F
                                            Jump if channel 0/2
                            JNC
                                  : E67C
167 EE99 D27CE6
168
169
                    * If channel 1/N:
170
                            DAD
                                  H
171 EE9C 29
                            DAD
                                  H
172 EE9D 29
173 EE9E 29
                            DAD
                                  н
                                            Continu
                            JMP
174 EE9F C37BE6
                                  :E67B
175
                    ********
176
                    * LIST AN EXPRESSION *
177
                    ************
178
179
                     Entry: BC:
                                   Points to expression in program.
180
                             (BC): 1.... Expr starts with operator.
181
                                   01... Variable reference.
                    *
182
                                   001.. Function call.
                    *
183
                                        Constant.
                                   Else
184
                    * Exit:
                             BC points after expression.
```

DE preserved, AFHL corrupted.

185

186

187

\*

```
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```

249 EEF1 C9

```
PUSH
                                    D
188 EEA2 D5
                     SCEXP
189 EEA3 OA
                              LDAX
                                     B
                                               Get opcode
                              ORA
                                    A
190 EEA4 B7
                              JP
                                     : EEDF
                                                If no starting operator
191 EEA5 F2DFEE
192
                     * If starting with operator:
193
194
                              INX
                                    H
195 EEAB 03
                                               Only 5 bits of opcode
                                     : 1F
                              ANI
196 EEA9 E61F
                                               , (, 5
                              CPI
                                     : 1A
197 EEAB FE1A
                                               Save opcode
                              PUSH
                                    PSW
198 EEAD F5
                                               List expr if binary
                              CC
                                     : EEA2
199 EEAE DCAZEE
                                               operation
200
                                    H,: CF86
201 EEB1 2186CF
                                                Addr table opcode strings
                              LXI
                     LOE300
                              MOV
                                               ) in DE
                                    D.H
202 EEB4 54
203 EEBS 5D
                              MOV
                                     E,L
                                     : DE39
                                               HL points after table
                              CALL
204 EEB6 CD39DE
205 EEB9 F1
                              POP
                                     PSW
                                               Get opcode
                              PUSH
                                    PSW
206 EEBA F5
                              XRA
                                               Comp it with table
207 EEBB AE
                                     М
208 EEBC 23
                              INX
                                    H
209 EEBD E61F
                              ANI
                                     : 1F
210 EEBF C2B4EE
                                     :EEB4
                                               Check next opcode if not
                              JNZ
                                               found
211
                                               If found: addr string in HL
212 EEC2 EB
                              XCHG
                              INX
                                    н
213 EEC3 23
                              MOV
                                               Get 1st char
214 EEC4 7E
                                     A.M
                                               Pnts to length
215 EEC5 2B
                              DCX
                                    H
                              CALL
                                     : DE02
                                               Check if upper case char
216 EEC6 CD02DE
                              PUSH
                                     PSW
217 EEC9 F5
                                               Print space if 1st char is
                              CC
                                     : CE6B
218 EECA DC6BCE
219
                                                a letter
                                               Print string from table
                              CALL
                                     : DB32
220 EECD CD32DB
                              POP
                                     PSW
221 EEDO F1
                              CC
                                     : CE6B
                                               Print space if 1st char was
222 EED1 DC6BCE
                                                a letter
223
                                               List remaining operand
                              CALL
                                     : EEA2
224 EED4 CDA2EE
                                               Get orig. opcode
                              POP
                                    PSW
225 EED7 F1
                                               Was it '(' ?
                              CPI
226 EEDB FE1A
                                     : 1A
                                               Then print ')'
227 EEDA CC55EF
                              CZ
                                     : EF55
                              POP
                                    D
228 EEDD D1
229 EEDE C9
                              RET
230
                     * Not starting with operator:
231
232
                     L0E301
                              RLC
233 EEDF 07
                              RLC
234 EEE0 07
                              JC
                                               Jump if var.ref
235 EEE1 DAF2EE
                                     :EEF2
236 EEE4 07
                              RLC
                                    : EEED
                                               Jump if function call
                              JC
237 EEE5 DAEDEE
238
                     * If constant:
239
240
                                               List constant
                              CALL
                                    :EF84
241 EEEB CD84EF
                              POP
242 EEEB D1
                                    D
243 EEEC C9
                              RET
244
                     * If function call:
245
246
                                               List function reference
247 EEED CD5AEF
                     L0E302
                              CALL
                                    : EF5A
                              POP
248 EEFO D1
                                    D
```

RET

```
250
                     * If variable reference:
251
252
253 EEF2 CDFCEE
                     L0E303
                             CALL
                                    : EEFC
                                               List a var.reference
                                               (array with arguments)
254
                             POP
                                    D
255 EEF5 D1
256 EEF6 C9
                             RET
257
                     *****************
258
                     * LIST A VARIABLE REFERENCE *
259
                     ****************
260
261
                                Entry for arrays without arguments (name
                     * SCARN:
262
263
                     *
                                only).
                     * LOE305: Entry for arrays with arguments.
264
265
                     * Entry: BC points to variable reference in program.
266
267
                     SCARN
                             MVI
                                    D. : BF
                                               Set mask 'no arg'
268 EEF7 16BF
                             JMP
                                    : EEFE
269 EEF9 C3FEEE
270
                                    D,:FF
                                               Set mask 'with arg'
                             MVI
271 EEFC 16FF
                     L0E305
                                               Save mask
                     L0E306
                             PUSH
                                    D
272 EEFE D5
                                    B
                                               Get byte
                             LDAX
273 EEFF OA
                              INX
                                    В
274 EF00 03
                                    : 3F
                             ANI
                                              Skip bit 6,7
275 EF01 E63F
276 EF03 57
                             MOV
                                               Rest in D
                                    D.A
                                    B
                                              Get next byte
                             LDAX
277 EF04 0A
                              INX
                                    B
278 EF05 03
                                               in E (Now DE is offset
                             MOV
                                    E,A
279 EF06 5F
                                               of start of symtab)
280
                                               Get start symtab
                             LHLD
                                    : 02A1
281 EF07 2AA102
                                               Add offset from start
282 EFOA 19
                             DAD
                                    D
                             POP
                                    D
                                              Get mask
283 EFOB D1
                                               Save var.addr in symtab
284 EFOC E5
                             PUSH
                                    н
285 EFOD CD95CA
                             CALL
                                    : CA95
                                              Find name in symtab
                                               Get T/L byte
286 EF10 7E
                             MOV
                                    A.M
                             ANA
                                    D
                                              AND with mask
287 EF11 A2
                                    PSW
288 EF12 F5
                             PUSH
                             INX
                                    н
289 EF13 23
290 EF14 E60F
                             ANI
                                    : OF
                                               Get length
                             MOV
                                               Get 1st byte of name in E
291 EF16 5E
                                    E,M
                             CALL
                                    : DB44
                                               List name: addr in HL,
292 EF17 CD44DB
                                               length in A
293
294 EF1A 1600
                             MVI
                                    D.:00
                                               Startaddr for IMPTAB
295 EF1C 213402
                             LXI
                                    H,:0234
                                               Addr var.type in IMPTAB
                             DAD
                                    D
296 EF1F 19
                             POP
                                    PSW
                                               Get mask
297 EF20 F1
                             PUSH
                                    PSW
298 EF21 F5
                                               Bits 4,5 only
299 EF22 E630
                             ANI
                                    :30
                                               Comp with IMPTAB
                             CMP
                                    M
300 EF24 BE
                                               Jump if identical
                             JZ
                                    : EF3C
301 EF25 CA3CEF
                                               FPT ?
302 EF28 FE00
                             CPI
                                    :00
                             MVI
                                    D.:21
                                               Then D: '!'
303 EF2A 1621
                                    :EF38
304 EF2C CA3BEF
                              JZ
                                               INT ?
305 EF2F FE10
                             CPI
                                    :10
                             MVI
                                    D.: 25
                                               Then D: '%'
306 EF31 1625
                                    :EF3B
                              JZ
307 EF33 CA3BEF
                                               Else: D: '$'
308 EF36 1624
                             MVI
                                    D.:24
309 EF38 7A
                             MOV
                                    A.D
                     L0E307
                                               Print type sign
                                    : DD60
310 EF39 CD60DD
                              CALL
```

PSW

Get mask

POP

L0E308

311 EF3C F1

373

```
:40
                                              Bit 6 only
312 EF3D E640
                             ANI
313 EF3F E1
                             POP
                                   H
                                              Get addr of string
314 EF40 CB
                             RZ
315
                     * Bit 6=1 (array with arguments):
316
317
                                   В
31B EF41 0A
                             LDAX
                                              Get nr of expressions
                             INX
319 EF42 03
                                   B
                             MOV
320 EF43 57
                                   D.A
                                              in D
321 EF44 CDF5EF
                             CALL
                                   :EFF5
                                              Print '('
                                   :28
322 EF47 28
                             DATA
                     L0E309
                             INX
323 EF48 03
                                   B
324 EF49 D5
                             PUSH
                                   D
325 EF4A CDAZEE
                             CALL
                                   :EEA2
                                              List expression
326 EF4D D1
                             POP
                                   D
327 EF4E 15
                             DCR
                                   D
                                              Ready ?
328 EF4F C470CE
                             CNZ
                                   : CE70
                                              If not: print ','
329 EF52 C248EF
                             JNZ
                                              and list next expr
                                   :EF48
330 EF55 CDF5EF
                             CALL
                                   :EFF5
                                              If ready: Print ')'
                     L0E310
331 EF58 29
                             DATA
                                   : 29
332 EF59 C9
                             RET
333
334
                     ************
                     * LIST A FUNCTION REFERENCE *
335
                     ***********
336
337
338
                     * Finds functionname in table with startaddress
                     * #CFE6 and prints it. Eventual arguments are
339
                     * printed between brackets.
340
341
                     * Entry: BC points to function code (#20).
342
343
                     * Exit: BC updated. AFEHL preserved, D=0.
344
                     SFUN
345 EF5A 03
                             INX
                                   B
346 EF5B OA
                             LDAX
                                   B
347 EF5C 03
                             INX
                                   B
348 EF5D 57
                             MOV
                                   D.A
349 EF5E 21E6CF
                             LXI
                                   H.: CFE6
                                             Startaddr function table
350 EF61 15
                     LOE312
                             DCR
                                              If found
351 EF62 FA6BEF
                             JM
                                   :EF6B
352 EF65 CDAECA
                                             Calc addr next string in tab
                             CALL
                                   : CAAE
                                             Test next function name
353 EF68 C361EF
                             JMP
                                   : EF61
                                   : DB32
354 EF6B CD32DB
                     LOE313
                             CALL
                                             List function name
                             MOV
355 EF6E 7E
                                   A.M
                                             Get byte after string
356 EF6F E60F
                                   : OF
                             ANI
                                             Only nr of following args
357 EF71 57
                             MOV
                                             in D
                                   D.A
358 EF72 C8
                             RZ
                                             Abort if no arguments
359 EF73 CDF5EF
                                             Print '('
                             CALL
                                   : EFF5
360 EF76 28
                             DATA
                                   :28
361 EF77 CDA2EE
                    L0E314
                             CALL
                                   : EEA2
                                             List expression
362 EF7A 15
                             DCR
                                             Decr nr of arg
                                   D
363 EF7B C470CE
                                             If <>0, print ','
                             CNZ
                                   : CE70
364 EF7E C277EF
                             JNZ
                                   : EF77
                                             and list next expr
                                             If ready: print ')'
365 EF81 C355EF
                             JMP
                                   : EF55
366
                     *************
367
                     * LIST A CONSTANT *
368
369
                    ************
370
                    * The constant is decoded to ASCII, prettied and
371
372
                    * printed.
```

```
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```

435

```
374
                     * Codes:
                                 #10: FPT
                                                #18: Quoted string
375
                                 #14: INT
                                                #19: Unquoted string
376
                     *
                                 #15: HEX
377
378
                     * Entry: BC: Points to constant in program.
379
                     * Exit:
                              BC updated, DE preserved, AF corrupted.
380
                               HL: points after end of printed string.
381
                     *
                     SCON
                             LDAX
382 EF84 0A
                                    B
                                              Get type of constant
383 EF85 03
                              INX
                                    В
                             MOV
384 EF86 60
                                    H, B
                                                Addr constant in HL
385 EF87 69
                             MOV
                                    L,C
                                              )
386
387
                     * If string:
388
389 EF88 FE18
                             CPI
                                    :18
                                              Quoted string ?
390 EFBA CAE1EF
                              JZ
                                    :EFE1
                                              Then list it
391 EFBD FE19
                             CPI
                                              Unquoted string ?
                                    :19
392 EF8F CAEDEF
                              JZ
                                    : EFED
                                              Then list it
393
394
                     * If number:
395
396 EF92 E7
                             RST
                                    4
                                              Copy constant value to MACC
                                    :00
397 EF93 OC
                             DATA
398 EF94 FE10
                             CPI
                                    :10
                                              FPT ?
399 EF96 CAABEF
                             JZ
                                    : EFAB
                                              Then list FPT value
400 EF99 FE14
                             CPI
                                    : 14
                                              INT ?
401 EF9B F5
                             PUSH
                                    PSW
402 EF9C CCBDEF
                             CZ
                                    :EFBD
                                              List INT value
403 EF9F F1
                             POP
                                    PSW
404 EFAO C4DAEF
                                    :EFDA
                             CNZ
                                              Else: list HEX value
405 EFA3 03
                     SC010
                             INX
                                   R
406 EFA4 03
                             INX
                                    B
407 EFA5 03
                             INX
                                    B
408 EFA6 03
                             INX
                                    B
                                              BC points after constant
409 EFA7 C9
                             RET
410 EFA8 CDD4EF
                                              List FPT value
                     SC020
                             CALL
                                    :EFD4
411 EFAB C3A3EF
                             JMP
                                    :EFA3
412
413
                     **************
414
                     * LIST A LINENUMBER *
415
                     *************
416
417
                     * Entry: BC: Points to linenumber.
418
                              BC updated, DE preserved, AFHL corrupted.
                     * Exit:
419
420 EFAE OA
                     LOE318
                             LDAX
                                   B
                                              Get hibyte linenr
421 EFAF 03
                             INX
                                   B
422 EFB0 67
                             MOV
                                   H, A
                                              in H
423 EFB1 0A
                             LDAX
                                   B
                                              Get lobyte linenr
424 EFB2 03
                             INX
                                   В
425 EFB3 6F
                             MOV
                                   L.A
                                              in L
426 EFB4 CD46EB
                     SLN10
                             CALL
                                   : EB46
                                              Linear into MACC
427 EFB7 7C
                             MOV
                                   A, H
428 EFB8 B5
                             DRA
                                              Linenr <>0 ?
429 EFB9 C4BDEF
                             CNZ
                                              Then list linear
                                   : EFBD
430 EFBC C9
                             RET
431
432
                     *********************
                     * LIST A INT VALUE OF MACC CONTENTS *
433
434
                     **********************
```

```
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```

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```
* The value is the contents of the MACC, prepared
436
                     for output, and moved into the outputbuffer
437
                    * DECBUF (#00E3). A Leading space is omitted.
438
439
                    * Exit: BCDE preserved. A corrupted.
440
                    *
                            HL: Points after string in DECBUF.
441
                    *
442
                                             Convert MACC for INT
                    SCINT
                            CALL
                                  : DB5F
443 EFBD CD5FDB
                                             output into DECBUF
444
445 EFC0 2A33C0
                            LHLD
                                  : CO33
                                             Get addr DECBUF
                    SSSPC
                            PUSH
                                  D
446 EFC3 D5
                            MOV
                                  D, M
                                             String length in D
447 EFC4 56
                            INX
                                  Н
448 EFC5 23
                            MOY
                                             1st char in A
449 EFC6 7E
                                  A.M
                            CPI
                                  :20
                                             Space ?
450 EFC7 FE20
451 EFC9 C2CEEF
                                  : EFCE
                                             Jump if no leading space
                            JNZ
                            INX
                                             ) Omit leading space
452 EFCC 23
                                  н
                            DCR
                                  D
453 EFCD 15
                                             Get nr of char in A
                            MOV
454 EFCE 7A
                    55510
                                  A. D
                            POP
                                  D
455 EFCF D1
                                            Print contents DECBUF
                            CALL
                                  : DB44
456 EFDO CD44DB
457 EFD3 C9
                            RET
458
                    ***************
459
                    * LIST FPT VALUE OF CONTENTS MACC *
460
                    *****************
461
462
                    * Exit: BCDE preserved. AF corrupted.
463
                    *
                            HL points after string in DECBUF.
464
465
                    *
                    SCFPT
                                            Convert MACC for FPT output
                                  :CE9B
                            CALL
466 EFD4 CD9BCE
                            JMP
                                  : EFCO
                                             List its contents
467 EFD7 C3C0EF
468
                    **************
469
                    * LIST HEX VALUE OF CONTENTS MACC *
470
                    *********************
471
472
                     Exit: BCDE preserved. AF corrupted.
473
                            HL points after string in DECBUF.
                    *
474
475
                                            Print '#'
                            CALL
                                  :EFF5
476 EFDA CDF5EF
                    SCHEX
                            DATA
                                  :23
477 EFDD 23
478 EFDE C34ADB
                            JMP
                                  : DB4A
                                            List in hex
479
                    ****************
480
                    * LIST A QUOTED STRING *
481
                    ***************
482
483
                      Entry: BC: Points to string.
484
                             BC and HL point after string.
                      Exit:
485
                    *
                             AF corrupted. DE preserved.
486
487
                            CALL
                                            Print "
488 EFE1 CDF5EF
                    SQTS
                                  :EFF5
                            DATA
                                  :22
489 EFE4 22
                                            List string
                            CALL
                                  : EFED
490 EFE5 CDEDEF
                            CALL
                                  :EFF5
                                            Print "
491 EFE8 CDF5EF
                            DATA
                                  :22
492 EFEB 22
                            RET
493 EFEC C9
494
495
                    ***************
                    * LIST UNQUOTED STRING *
496
```

\*\*\*\*\*\*\*\*\*\*\*\*\*\*

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498
                    * Entry: BC points to string.
499
                            BC annd HL point after string.
                    * Exit:
500
                            AFDE preserved.
501
502
                   SUQTS
                           MOV
                                 H.B
                                          ) Stringaddr in HL
503 EFED 60
                                 L.C
                           MOV
                                           )
504 EFEE 69
                           CALL
                                : DB32
                                          List string
505 EFEF CD32DB
                           MOV
                                 B.H
                                          )
506 EFF2 44
                                          ) Addr after string in BC
                           MOV
                                 C,L
507 EFF3 4D
                           RET
508 EFF4 C9
509
                    ***********
510
                   * LIST CHARACTER *
511
                   ******
512
513
                   * Entry: On stack: The address of the character to
514
                                      be printed.
515
                            BCDEHL preserved. F corrupted.
                   * Exit:
516
                            A: Character printed.
517
518
                                           Get addr from stack
519 EFF5 E3
                   SCHRI
                           XTHL
                           MDV
                                 A,M
                                           Get char
520 EFF6 7E
                                          HL pnts after char
521 EFF7 23
                           INX
                                 Н
                                           Returnaddr on stack
522 EFF8 E3
                           XTHL
                                 : DD60
523 EFF9 C360DD
                           JMP
                                          List char.
524
                   ***********
525
                    * LIST EXPRESSION; PRINT SPACE *
526
                   **********
527
528
                   SEXPS
529 EFFC C368CE
                           JMP
                                 : CE68
                                          List expr, print space
530
                           DATA : 3E
531 EFFF 3E
532
533
534
                           END
535 F000
**********
*SYMBOL TABLE *
**********
                                        LOE303 EEF2
LOE300 EEB4
              LOE301 EEDF
                           LOE302 EEED
LOE305 EEFC
                           LOE307 EF3B
                                         LOE30B EF3C
              LOE306 EEFE
L0E309 EF48
              L0E310 EF55
                           L0E312 EF61
                                         LOE313 EF6B
                           L0E350 EE15
                                         MPT02 EEBD
L0E314 EF77
              LOE31B EFAE
                           RTK40 EE94
                                               EE55
MPT17 EEOF
              RLA20 EE4C
                                         S2510
S2710 EE79
              S2720
                    EE7C
                           SC010 EFA3
                                         SC020 EFAB
                                         SCFPT
                                               EFD4
SC22A EE25
              SCARN
                    EEF7
                           SCEXP
                                  EEA2
                    EFF5
                                  EFBD
                                         SCN21
                                               EE09
SCHEX
      EFDA
              SCHRI
                           SCINT
                                         SCN25
                                               EE52
SCN22 EE1A
              SCN23 EE30
                           SCN24 EE4F
                                         SCON
                                               EF84
SCN26
              SCN27
                    EE71
                           SCN28 EE87
      EE66
                                         SQTS
                                               EFE1
SEXPS
      EFFC
              SFUN
                    EF5A
                           SLN10
                                  EFB4
```

SSS10 EFCE

SSSPC

EFCO

SUQTS EFED