

; Disassembly of the Smart Basic loader

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OPENFILE      .equ      0FCC0h
READFILE      .equ      0FCD2h
CLOSEFILE     .equ      0FCC3h
SMARTWRITER   .equ      0FCE7h

DESTADDR      .equ      0d000h
BLOCKSLEFT    .equ      0d002h

ONEKB         .equ      0400h

FILENUMBER    .equ      0d004h

        .org      0c800h

        di                ; Disable interrupts
        jr          Continue ; Jump over program name
ProgName:
        .db      42h      ; 'B'
        .db      41h      ; 'A'
        .db      53h      ; 'S'
        .db      49h      ; 'I'
        .db      43h      ; 'C'
        .db      50h      ; 'P'
        .db      47h      ; 'G'
        .db      4dh      ; 'M'
        .db      02h
        .db      03h
ProgStart:
        .db      00h
        .db      01h
ProgSize:
        .db      1ch
        .db      00h
Continue:
        ld      sp, 0fe58h ; Set the stack pointer
                                ; Setup to load BasicPgm (Smart
Basic)
        ld      a, b        ; B = current device number
        ld      b, 01h     ; File mode 1 = read
        ld      hl, ProgName ; Name of file to open
        call    OPENFILE   ; EOS Open File
        jr      z, NoOpenError ; Z flag set = no error
        jp      SMARTWRITER ; Exit to Smart Writer
NoOpenError:
        ld      (FILENUMBER), a ; Save the File Number returned by
OPENFILE
        call    LoadBasic    ; Load Smart Basic
        cp      0h          ; Load return 0?
        jr      z, NoLoadError ; Yes so no error
        jp      SMARTWRITER ; Exit to Smart Writer
NoLoadError:
        ld      a, (FILENUMBER) ; Get the File Number
        call    CLOSEFILE    ; Close the file
        jr      z, NoCloseError ; No error closing
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        jp      SMARTWRITER          ; Exit to Smart Writer
NoCloseError:
        ld      hl,(ProgStart)      ; Address we loaded Basic at
(0100h)
        jp      (hl)                ; Jump to it
LoadBasic:
        ld      hl,ProgStart         ; Address to load Basic to (0100h)
        ld      de,DESTADDR         ; Copy it and the size to 0d000h
        ld      bc,04h              ; (4 bytes)
        ldir                          ;
LoadLoop:
        ld      hl,BLOCKSLEFT       ; Decrement Number of blocks left
        dec     (hl)
        ld      a,(FILENUMBER)      ; Load the FILENUMBER
        ld      hl,(DESTADDR)       ; Where to store it
        ld      bc,ONEKB            ; Load 1k of data
        call   READFILE
        jr      nz,LoadBasicError    ; Error loading - return
        ld      bc,ONEKB
        add     hl,bc                ; Increment DESTADDR by 1kb
        ld      ix,0d000h           ; Save HL to DESTADDR using IX
        ld      (ix+0),l
        ld      (ix+1),h
        ld      a,(0d002h)          ; BLOCKSLEFT == 0?
        cp      0h                  ; Compare to A
        jr      nz,LoadLoop         ; A <> 0 jump to LoadLoop
        ret                          ; Return no error
LoadBasicError:
        ld      a,1h                ; Return with an error
        ret
        .end

```