**MONITOR 2.0 SPECIFICATIONS**

1. Memory Organization

FFFF-----------------------

BIOS (same as CP/M)

E600-----------------------

MONITOR

D000-----------------------

TPA

0100-----------------------

PZERO (same as CP/M)

0000-----------------------

1. Commands

* BOOT – warm boot
* MEMORY – memory operations
* RUN – execute a program
* XMODEM – receive a file
* HEX2COM – convert hex file to executable
* ASCII2COM – convert ASCII file to binary
* DISK – disk operations
  1. MEMORY operations

>READ aaaa Read one page, starting at aaaa.

<ENTER>=Next page, <ESC>=quit.

>WRITE aaaa,c1 c2…cN Write starting at aaaa. End sequence with <ENTER>. Characters c1, c2… cN may be separated by blank spaces.

>FILL aaaa-bbbb,cc Fill area aaaa till bbbb with cc.

>COPY aaaa-bbbb,cccc Copy area aaaa till bbbb to cccc.

>COMPARE aaaa,bbbb Compare content of two memory areas.

All parameters (aaaa, bbbb, cccc and cc) are in hexadecimal.

* 1. RUN

>RUN aaaa Execute program at aaaa.

* 1. XMODEM

>XMODEM aaaa Receive a file, using xmodem protocol, and save at aaaa.

* 1. HEX2COM

>HEX2COM aaaa Convert HEX file (Intel format) at aaaa

to executable.

* 1. ASCII2COM

>ASCII2COM aaaa Convert ASCII file at aaaa into binary file at TPA (0100h).

* 1. DISK operations

Disk operations are addressed using DTS format (Disk, Track, Sector). In order to keep compatibility with CP/M 128MB Flash, these are the physical limits:

* Disk in range [A; P] (16 disks)
* Track in range [000; 1FF] (512 tracks/disk)
* Sector in range [00; 1F] (32 sectors/track)

(512 bytes/sector)

>DREAD d,ttt,ss Read one sector, starting at the

specified location (d,ttt,ss).

<ENTER>=next sector, <ESC>=quit.

>DOWN d,ttt,ss Download one sector from d,ttt,ss to memory 0E000h.

>UP d,ttt,ss Upload one sector from memory 0E00h to disk location d,ttt,ss.

>VERIFY d Verify disk.

>FORMAT d Format disk (only create CP/M allocation table).

For all verify sector operations, original content will be lost! All parameters, except disk, are in hexadecimal.