

MFAMON – ROM monitor for the MFA Computer

This monitor is based on the 2.0C monitor from Vector Graphic. The original version has been updated to use the 8251 serial ports in the MFA computer and a few commands have been added and/or modified.

This code resides in a PROM at address zero in the MFA computer. When the computer is reset, the PROM copies the monitor code from PROM into RAM and then jumps to it. The execution address of the monitor in RAM is typically at F800h.

Command Summary:

B boot disk from track 0, sector 1 of the 1st drive
C **SSSS FFFF CCCC** compare blocks of memory
D **SSSS FFFF** dump memory in hex and ASCII
E **SSSS FFFF DDDD** exchange blocks of memory
F **SSSS FFFF DD DD** find two byte sequence in memory
G **SSSS** go to and execute
H **help menu**
I **PP** input from I/O port
J **SSSS** go to and execute (G)
K **SSSS FFFF DD** fill block of memory with “K” onstant
L **P** load Intel hex file from serial port 0 or 1
M **SSSS FFFF DDDD** move block of memory
O **PP DD** output to port
P **LLLL** program memory (modify memory)
Q **SSSS FFFF** compute checksum on range of memory
S **SSSS FFFF DD** search for single byte in memory
T **SSSS FFFF** test memory

Using MFAMON

The command prompt is an asterisk. Backspace and DEL are not used. If you make a mistake, press ESC (or ctrl-c) to get back to the prompt and re-enter the command. Most executing commands can be aborted by ESC (or ctrl-c).

All commands are a single letter. Four hex digits must be typed in for an address. Two hex digits must be typed for a byte. The serial port selection, (0 or 1) for the L (load Intel hex file) command, is a single digit.

The spaces you see between the parameters are displayed by the monitor – you don't type them. The command executes as soon as the last required byte is typed – a RETURN should not be typed.

Long displays (e.g., memory dump) can be paused/resumed with the space bar.