MMBasic for DOS

MMBasic is an implementation of the BASIC language with floating point and string variables, long variable names, arrays of floats or strings with multiple dimensions and powerful string handling.   It is generally compatible with Microsoft BASIC so it is easy to learn and run.

MMBasic was originally written for the Maximite; a small computer which included built in video and keyboard interfaces and is based on the PIC32 microcontroller from Microchip.

This manual covers the version of MMBasic which can run in the DOS box of Windows. The intention of this version is to provide developers, who are considering adopting MMBasic for an embedded platform, the opportunity to test the language. The DOS implementation also makes a convenient starting point for porting MMBasic to a new platform as it has minimal dependencies with the hardware that it is running on.

This version can run quite large and complex programs so it is also useful for learning the BASIC language or running BASIC programs in a DOS/Windows environment.

> If you are familiar with the Maximite please note that this version does not attempt to emulate the Maximite environment. Due to limitations of the DOS window this version does not support the full screen editor, line editing, graphics, special keyboard keys or external input/output.
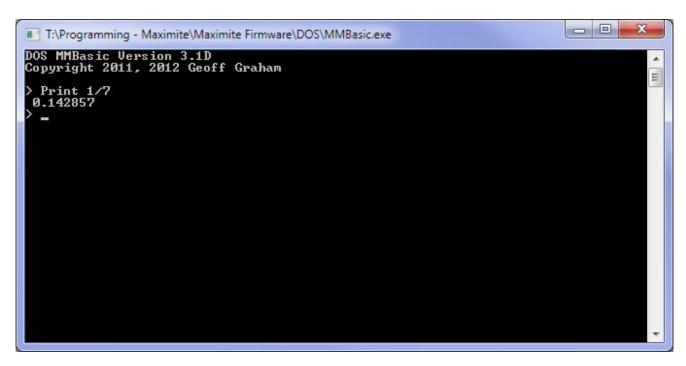
Downloads

You can download:

- The DOS version of MMBasic from http://mmbasic.com
- The MMBasic Language Manual from http://mmbasic.com

Installing and Running DOS MMBasic

The DOS version of MMBasic does not need any installation. All you need do is copy the executable file (MMBasic.exe) to the directory of your choice. The executable is fully self contained; there are no libraries or other files required.

To run MMBasic just double click on the executable file (MMBasic.exe) and MMBasic will start running in a DOS box.

You can start MMBasic running a BASIC program by including the program's file name on the Windows command line. If, within Windows, you associate files with the extension of .BAS to MMBasic.exe you will then be able to run an MMBasic program simply by double clicking on the program in Windows explorer. You can also drag a basic program onto the MMBasic icon and it will start up running the program.

It is possible to copy and paste text to and from MMBasic using the standard copy and paste facilities of the DOS box.

Developing Programs

If you are using line numbers you can use the traditional method of entering and editing programs in BASIC (ie, prefix the line with a number and use commands like DELETE and LIST).

If you are not using line numbers you should use a Windows editor like Notepad to edit your program as a file within Windows then save and double click on the file to run it in MMBasic. Do not use a word processing editor like WordPad or Word as they will insert formatting commands in the file causing errors when run in MMBasic.

The Crimson Editor (http://www.crimsoneditor.com) is an excellent editor for developing MMBasic programs as you can define a single key that will save the file and run MMBasic with the file's name on the command line. This results in a very fast edit/save/run cycle.

Differences to the Maximite Version of MMBasic

The main difference between the DOS version of MMBasic and the version running on the Maximite family (Maximite, mini Maximite, UBW32, CGMMSTICK1, DuinoMite and others) is that the DOS version does not support the specialised hardware of the Maximite.

This means that the following facilities are not supported:

- Graphics, fonts, special keyboard keys and the full screen editor
- External I/O, sound, interrupts and communications protocols (serial, I2C, SPI and 1-wire).
- The CONFIG command and the DIR$() function.

DOS MMBasic has two extra commands:

- QUIT which will close MMBasic and return to the operating system.
- SYSTEM which will issue a DOS command to the operating system.

For a full description of the commands and functions in the DOS version of MMBasic you should refer to the MMBasic Language Manual which can be downloaded from http://mmbasic.com