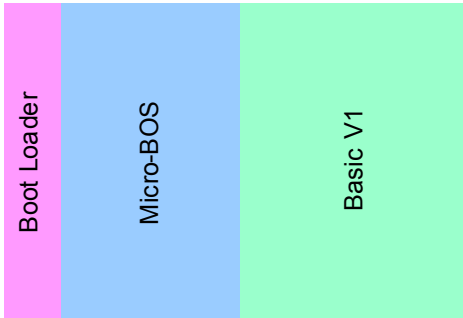


## BV513 Upgrade notes

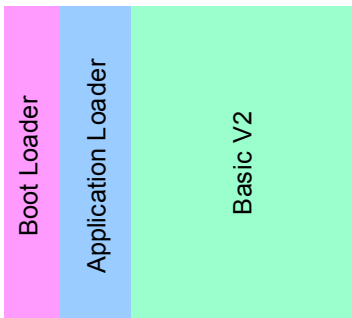
This text is information on how to upgrade the BV513 from Basic version 1 to version 2.

### Introduction

Version 2 is a major upgrade and as such the previous loader, known as Micro-BOS has been replaced with a new more space efficient loader called the application loader. Basic 2 sits on top of this application loader.



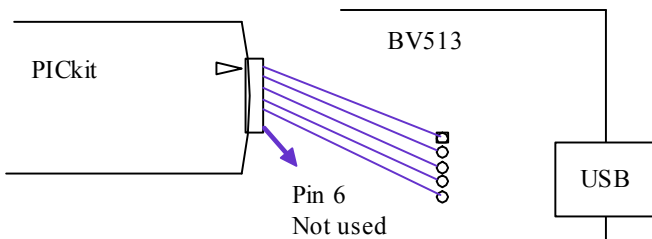
The above is the Flash memory layout for the V1 Basic.



This is the new layout where the application loader has been reduced and more functionality placed in the application. The boot loader will almost never be needed as the application loader can load not only Basic but any C application. Because of the difference in size of the application loader the old boot loader will not load the new application loader and the only way to do this is by using a PIC programmer.

### Installing the Application loader

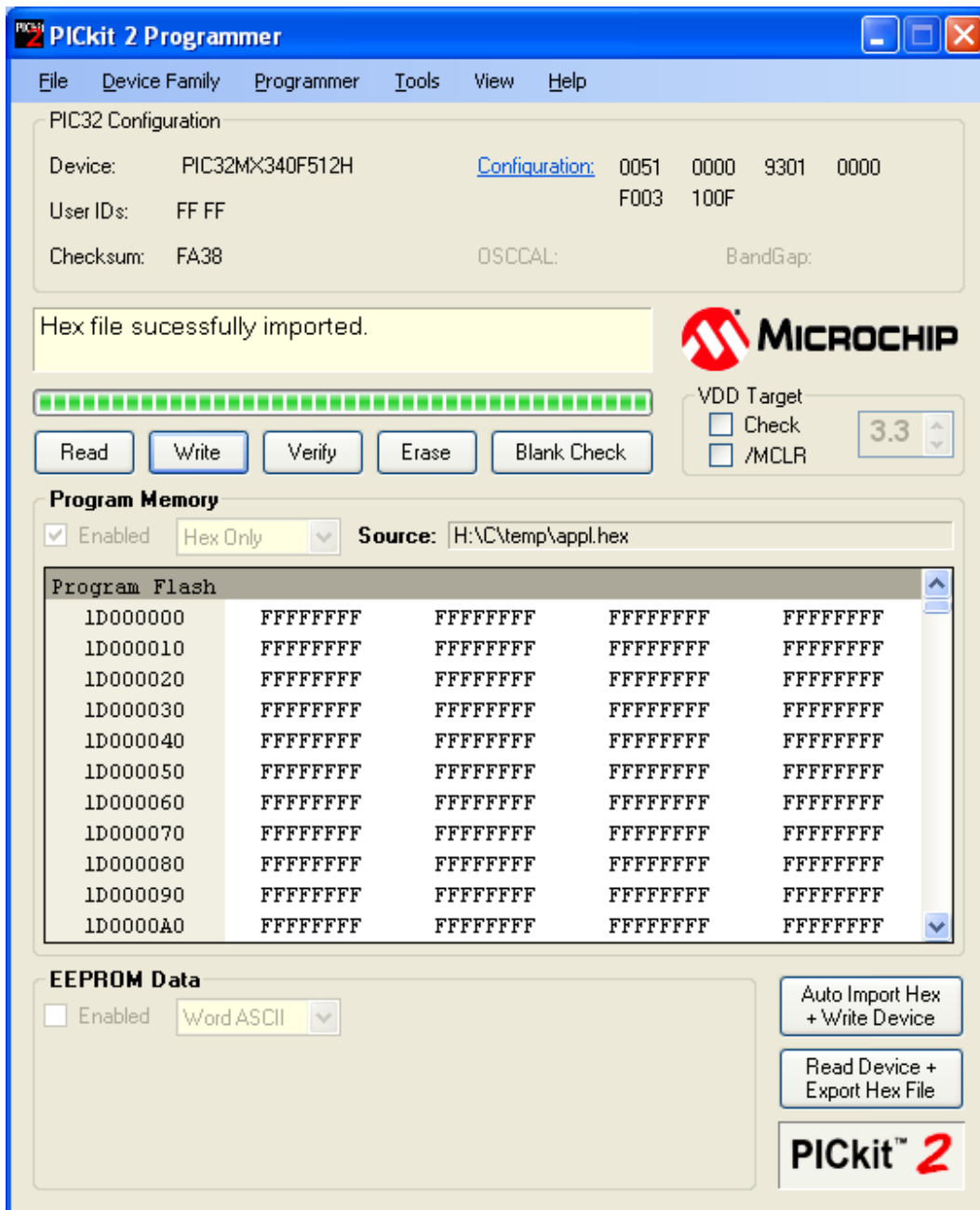
A PIC programmer is required for this and the most popular one is the PICkit although any PIC programmer should do.



The BV513 has a set of 5 holes at the back of the USB connector, one of the holes has a square pad, this is pin1. The PICkit is connected to the BV513 via these holes on a 1:1 map. That is, pin 1 of the PICkit goes to pin 1 on the BV513, pin 2 of the PICkit goes to pin 2 of the BV513 etc. This is illustrated in the diagram above. Pin 6 of the PICkit is not used and can be left disconnected.

**\*\*\* There is no need to solder anything in place, simply use some spare pin type connectors and hold the programmer in place whilst programming \*\*\***

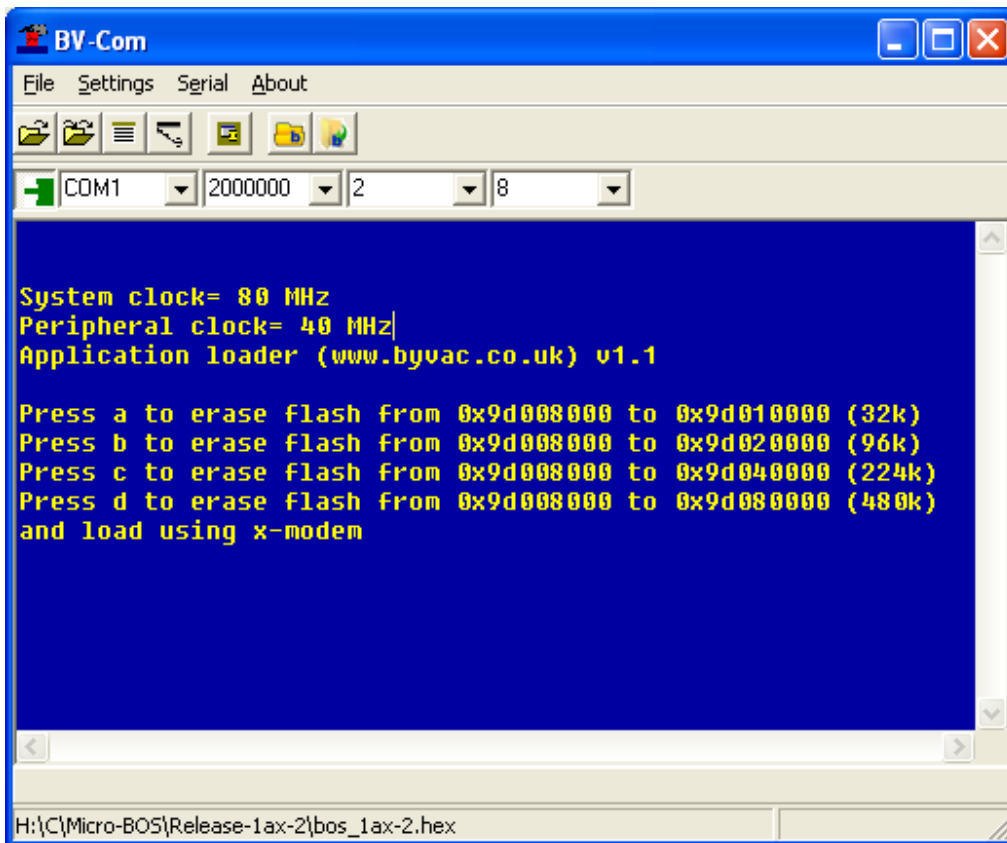
Using the PICkit programmer, import 'appl.hex' and then write it to the BV513 using the write button.



This takes just a few seconds.

Open BV-COMM, press reset if necessary and you will be presented with the application loader screen.

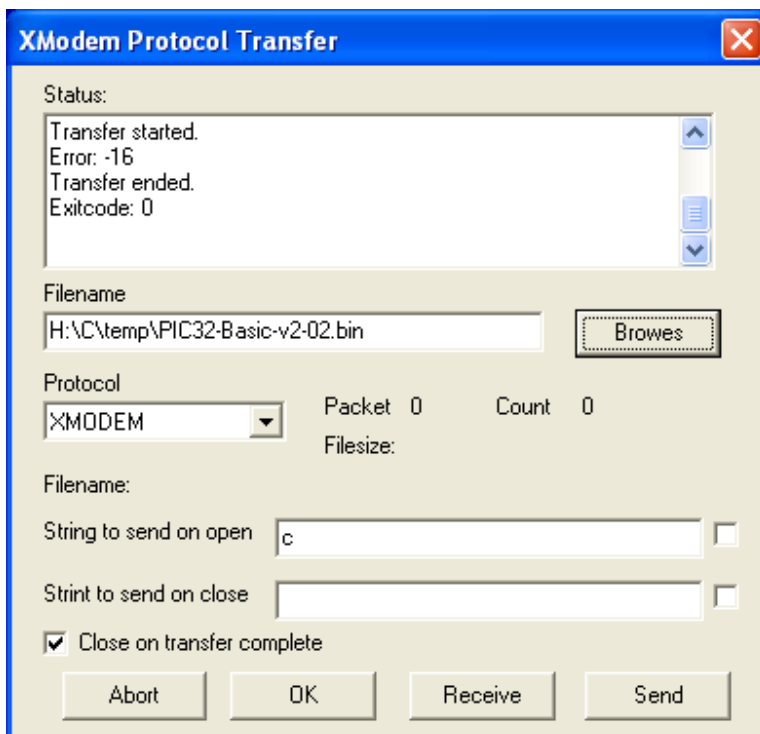
**NOTE that the app loader and Basic now run at 200000 Baud by default.**



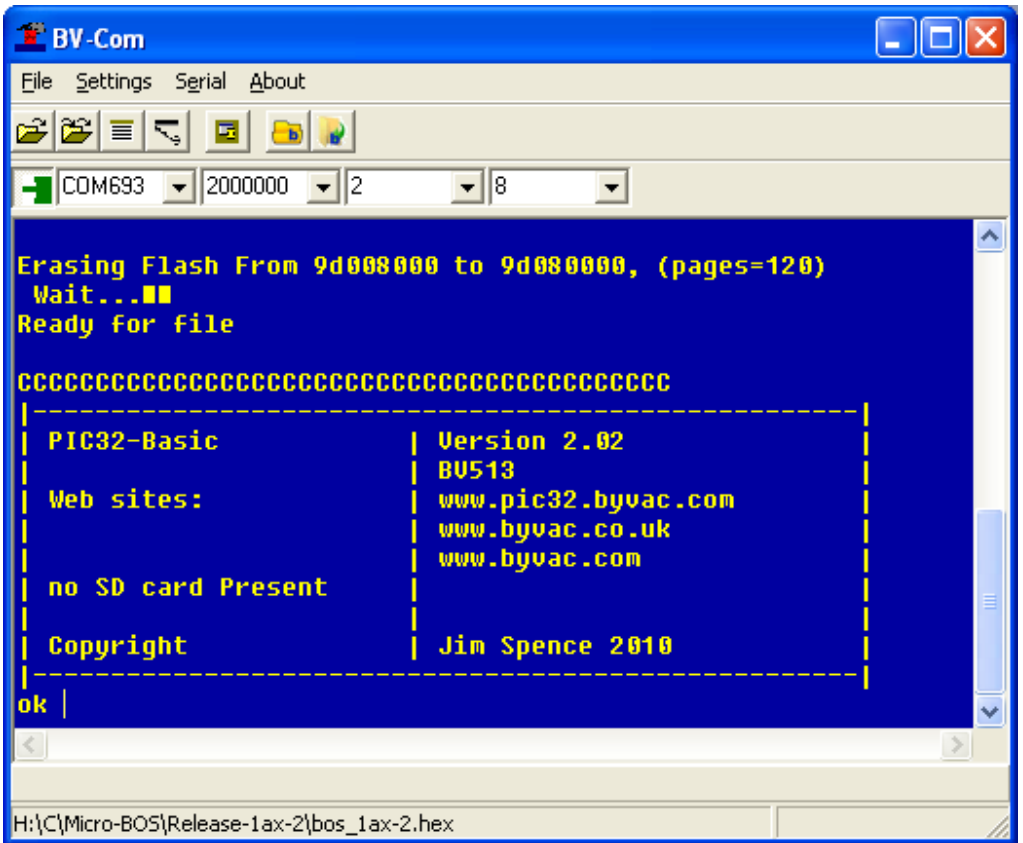
press 'd' and a series off CCCC will appear after the flash has been erased, this means that the application loader is ready to accept a file. When this happens press

the xmodem icon 

Use brows to select the current Basic Version 2 file and then press send.



The file takes a few seconds to download.



Basic Version 2 ready to go.

From now on the application loader can be used for all versions of Basic 2.