

MMflash

A wrapper for pic32prog.exe

Pic32prog is a flash programming utility for Microchip PIC32 microcontrollers by Serge Vakulenko

The ASCII mode was added by Robert Rozee.

<https://github.com/sergev/pic32prog>

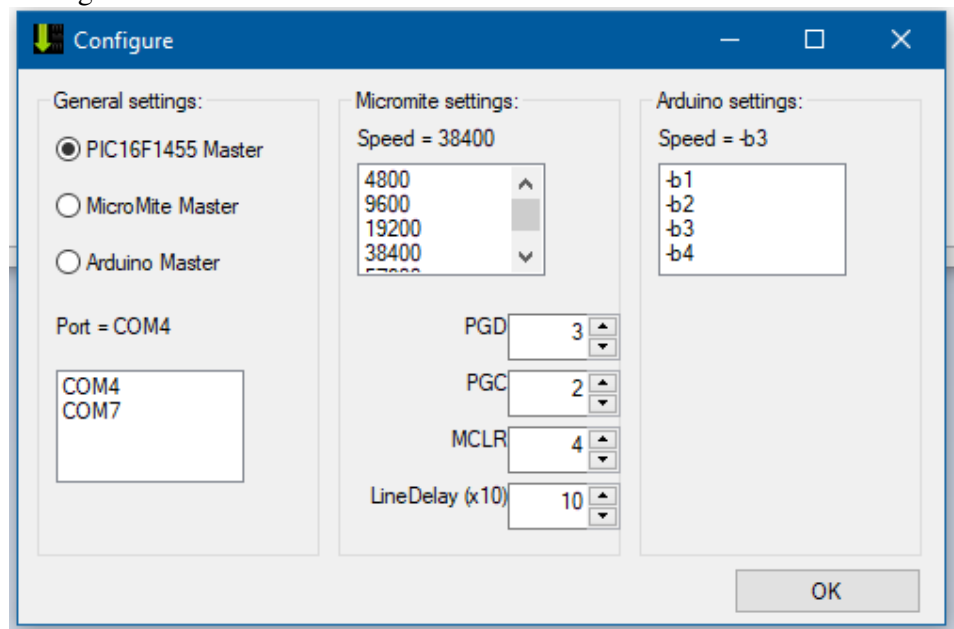
The ASCII mode made it possible to use a low cost PIC16F1455, Arduino or Micromite to program PIC32 chip without the need for MPLAB and a Pickit3.

Peter Mather wrote the code for the PIC16F1455 and the CFUNCTION to allow the micromites to be used and Geoff Graham gave us MMBasic.

This wrapper is the easy part.

Unzip the files into any writable folder. MMflash write to the folder so it must have write permissions. "Program Files" is not a good location.

Configure.



For Micromites, select the com port and baud rate that it is currently set at. The baud rate gets changed to 115200 during programming.

You also need to set the pins that are used for the 3 functions

PGD, PGC and MCLR.

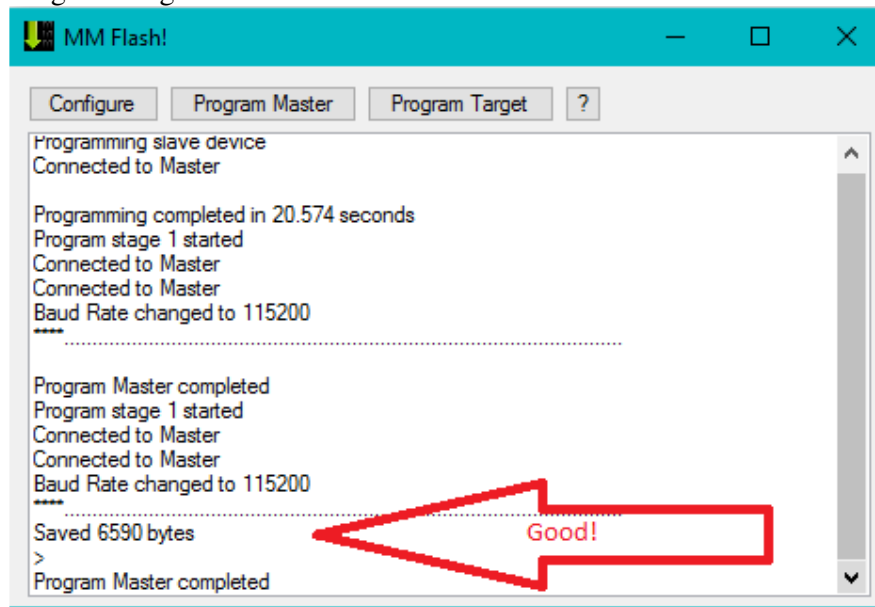
The line delay is needed during uploading the program. 10 (100ms) is the minimum that works reliably.

For Arduino, usually the only setting is com port. -b3 is the most common setting for baud rates but you may have to try other settings.

For the PIC16F1455, the only setting is port number.

The settings are saved between sessions.

## Programming the Master PIC



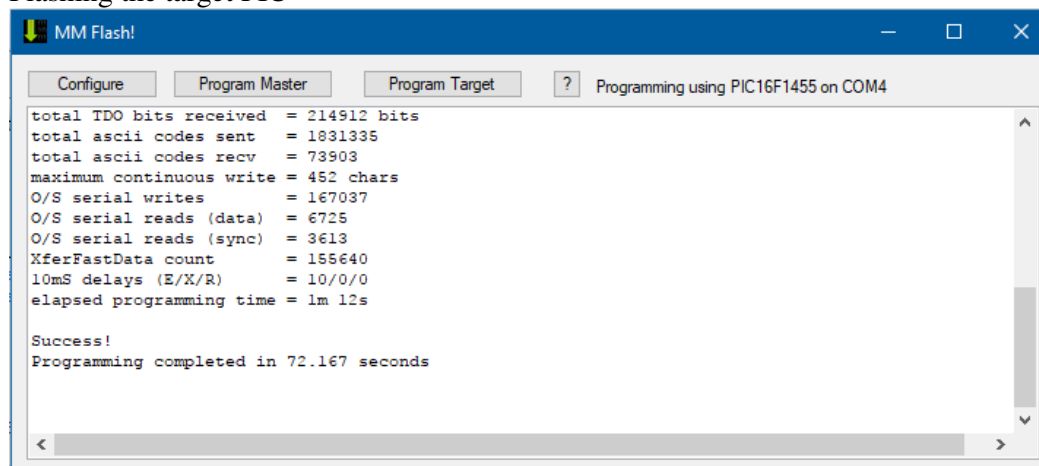
For the micromites, a successful load is indicated by the 'SAVED xxxx bytes'  
If you don't see this, it is worth trying again.

For Arduinos the programming is much faster.

To set up a PIC16F1455, see the article on Geoff's website (or Silicon Chip Magazine)

<http://geoffg.net/microbridge.html>

## Flashing the target PIC



Select the HEX file and sit back....

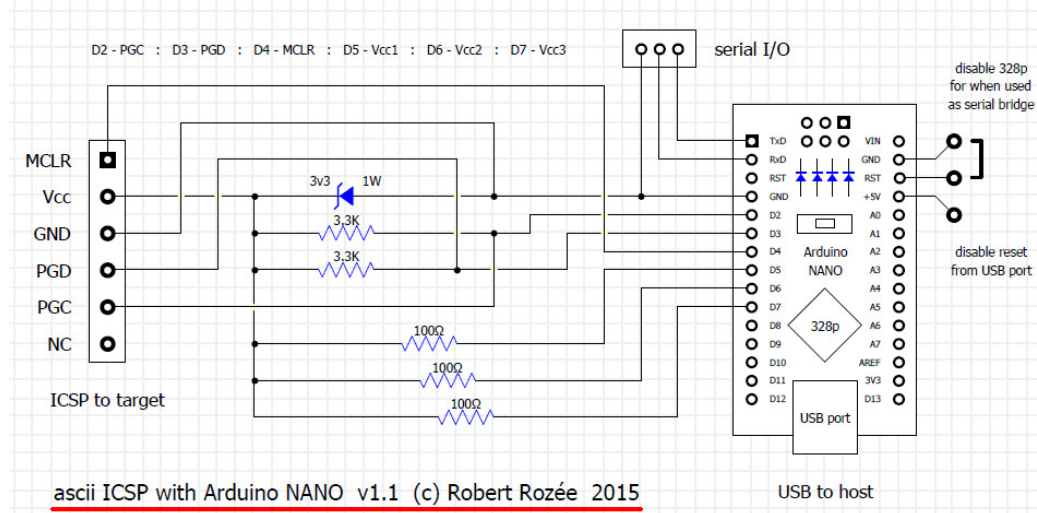
Windows only. Once the configuration is set, you can create a desktop shortcut and drag a HEX file onto the shortcut. MMflash will open and, after confirmation, start the flash process.

For the latest version of MMFlash: <http://www.c-com.com.au/stuff/MMflash.zip>

## The hardware.

Your Target chip needs the Vcap capacitor and a 10k pullup resistor on MCLR. All supplies and grounds need to be connected.

If you are using an Arduino, you need a few extra components.



MicromiteMK2 needs to have MMBasic V5.1 or better.

Micromite Plus runs with MMBasic V4.7 beta37 or V5.1 or better.

No other components are required.

In both cases the three pins PGD, PGC and MCLR can be any IO pin.

The other connection required between the two devices, Master and Target, is GND  
3.3V can be supplied from the Master or a separate source.

For information on the Microbridge – PIC16F1455 see Geoff's website

<http://geoffg.net/microbridge.html>