

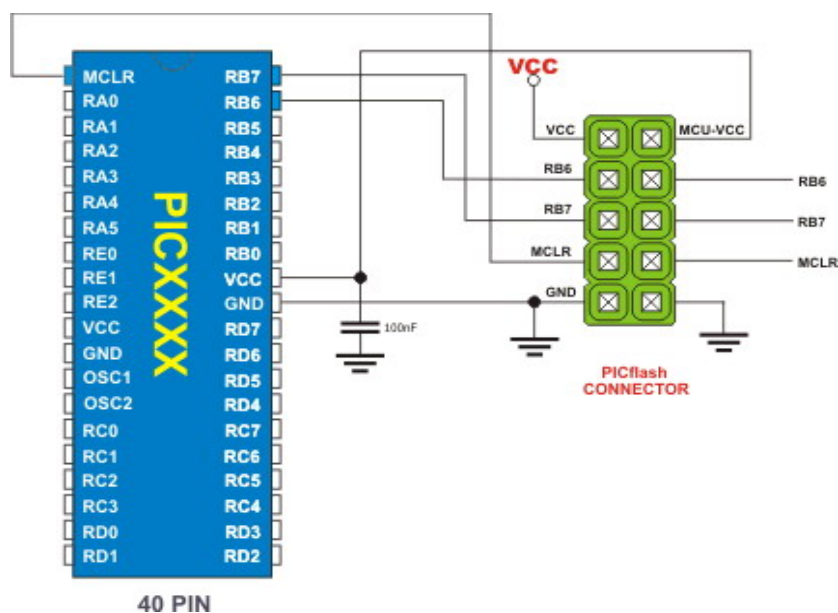
# PICFlash2



**PICFlash2** is a programmer for the Microchip's **FLASH** microcontroller family. Besides the standard FLASH microcontrollers, it can also program the newest models from **PIC18** family.

Our latest PICFlash2 Programmer is driven and powered from a **single USB port** on your computer. No additional **AC** power adapter is needed. The programmer is **recognized** by Windows, which simplifies driver **installation**. The programmer board is specifically designed for **In-Circuit Serial Programming (ICSP)**.

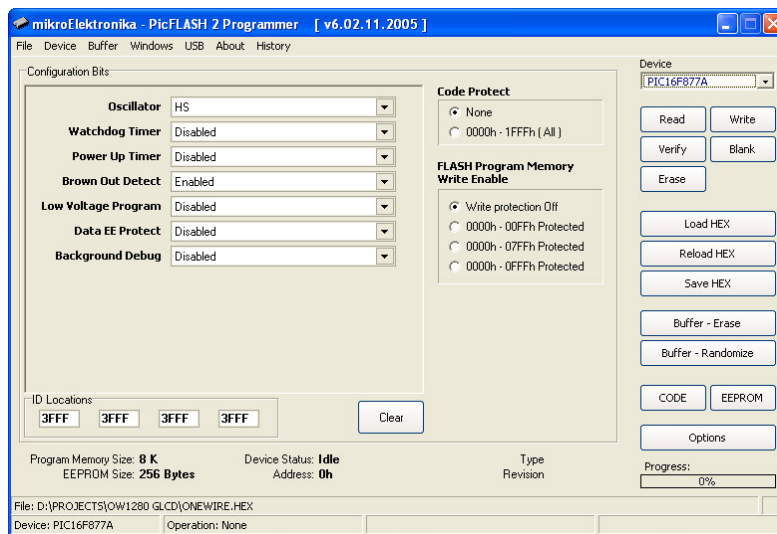
## WHAT'S ON BOARD



When connected to a device or a development system, it becomes **IN-SYSTEM** programmer.

When plugged in ZIF socket, it becomes a standard programmer. You can order optional ZIF socket, used only for high volume production.

One of the possibilities for connecting PICFlash2 to a microcontroller is via an **IDC10 connector**. Look at the picture on the right side. All you have to do is to put one 2x5 connector between microcontroller and other parts of the board. Inserting PICFlash2 connector you will be able to program **PIC In System**.



**PICFlash2:** You will get the USB programmer which doesn't use boot loader or any similar way of programming. The **whole** PIC memory and all pins are available to you. If you do use boot loader, you have to leave some RAM memory for this propose, and it is generally not a good idea if you program in **Pascal**, **C** or **Basic**. Also if you use low-level programming (5 VDC instead 12.5 VDC), note that you lose RB6 pin. PICFlash2 have voltage pump and generate 12.5 VDC so you have all pins for your project. Aside from that, you will have **state-of-the-art** fast USB PIC In-System programmer for your future projects.

The microcontroller is connected to the PICFlash2 programmer via 5 lines, two of which are +5V and GND. Unlike programmers whose operation is based on boatloads (and which need to give away part of their memory to a boatload program) PICFlash2 programs the microcontroller externally so that the entire memory is available for the programmer. PIC microcontrollers can be programmed with 5V and 12.5 V. If programmed with 5V, RB3 pin cannot be used for anything else except for programming, so that one pin of the microcontroller is not available for an application.

PICFlash2 programs with 12.5V generated through a supply pump from the supply voltage (+5V) thus leaving the RB3 pin free. Connection to the computer is made via the serial port, so PICFlash2 programmer **can work on all** computers.

### Keyboard Shortcuts

New version of software includes a number of shortcuts which facilitate programming:

- Alt-E** Erase
- Alt-B** Blank check
- Alt-W** Write
- Alt-V** Verify
- Alt-R** Read
- Alt-D** Change MCU
- Ctrl-S** Save
- Ctrl-O** Open (Load)
- Ctrl-R** Reload

### Command Line

Alternatively, you can use the PICFlash2 programmer from the command line. Here are the command line parameters:

- w** Write to PIC
- v** Verify
- r** Read from PIC
- e** Erase PIC
- p** PIC name (for example P16F877A, P18F452...)
- f** Filename (use " as delimiters)

Examples:

```
picflash2.exe -w -pP16F877A -v -f"C:\somefile.hex"
```

This will **program** the PIC using C:\somefile.hex and it will verify the write.

```
picflash2.exe -r -pP16F877A.
```

This will **read** the PIC contents into on screen buffer.

```
picflash2.exe -e -pP16F877A
```

This will **erase** the PIC.