

## **PIC-MCP-USB - MPLAB COMPATIBLE PIC 8/18/28/40 PIN DEVICES PROGRAMMER**



### **FEATURES**

- PIC-MCP-USB is low cost alternative of Picstart+. It's MPLAB compatible and MPLAB recognize PIC-MCP-USB as Picstart+. This is the perfect solution for the new computers without RS232 port as it generates RS232 signals and power supply from USB port. PIC-MCP-USB have gold plated 40 pin ZIF socket which accepts all types of DIP PIC microcontrollers. In addition it have ICSP connector and can be used to program all PIC-PxxB prototype boards.
- Supported devices: ALL devices which PICSTART+ supports (excluding PIC17XXX series)
- ICSP 30 cm (12") cable
- Dimensions 100x80 mm (3.9x3.15")

### **DOCUMENTS:**

- [PIC-MCP.pdf](#)
- [PIC-MCP tutorial in Spanish](#) made by our Chile distributor
- [PIC ICSP connector](#)

### **SOFTWARE:**

- Firmware upgrade [UPGRADE-130](#) upgrades firmware for MPLAB 8.10
- [FT232 drivers for your OS](#) download and install to may work with PIC-MCP-USB via the virtual COM port and MPLAB

### **How to use PIC-MCP-USB:**

When you use PIC-MCP-USB you very first time you have to load from FTDI web the proper drivers for your OS and install them.

After the driver installation when you connect PIC-MCP-USB you will see in your Windows Device manager USB-to-RS232 virtual COM port.

You just have to point MPLAB to search for PICSTART+ on this Virtual COM port and you are done.

On the PIC-MCP-USB board there is arrow mark where to put the PIC pin.#1 so all PICs are put the same was PIN.#1 to arrow mark.

Only the very old PIC16C5X microcontrollers have different way to stuff and there is special mark on the ZIF socket where to put their PIN.#1 down right.

The white cable is for ICSP programming you connect it to your target board and program your PIC on your target.

The ZIF socket is for programming DIP PIC parts.

When you use ICSP you have to close the JUMPER on the board , when you program in ZIF socket you should left open this Jumper.

### **How to upgrade:**

The upgrade procedure is very simple. You load from our web site the latest UPGRADE program, plug your PIC-MCP-USB and wait it to create Virtual COM port then run the upgrade program.

All PIC-MCP-USB solde after January 2004 are with PIC18F252 microcontroller on them and follwoing procedure should be done: connect USB cable, wait USB driver to establish Virtual COM port then run PIC-MCP-upgrade.exe and setup for the virtual COM port, after the message for sucessful upgrade un-plug the USB cable, wait Windows to remove the virtual OCM port and connect USB cable again to re-start the new firmware.

PIC-MCP-USB build before January 2004 and with PIC16F876A firmware have different way to upgrade: you have to put PIC18F252 in ZIF socket, remove ICSP jumper, connect USB cable, wait USB driver to establish Virtual COM port then run PIC-MCP-upgrade.exe and setup for the virtual COM port, after the message for sucessful upgrade un-plug the USB cable and pull PIC16F876A from DIL socket and replace with the new programmed PIC18F252. All future upgrades will be made with the build-in bootloader inside PIC18F252 so you just have to run the newest PIC-MCP-upgrade.exe

### **VERY IMPORTANT: DO NOT PUT OTHER THAN PIC18F252 MICROCONTROLLER WHEN YOU RUN THE UPGRADE SOFTWARE**

If you have burned your PIC18F252 during your development work you can buy from us replcement PIC18F252 with firmware.

#### **ORDERING CODES:**

**PIC-MCP-USB** Completely assembled and tested