

# CK1710 (K182) - ALL-FLASH USB PIC PROGRAMMER

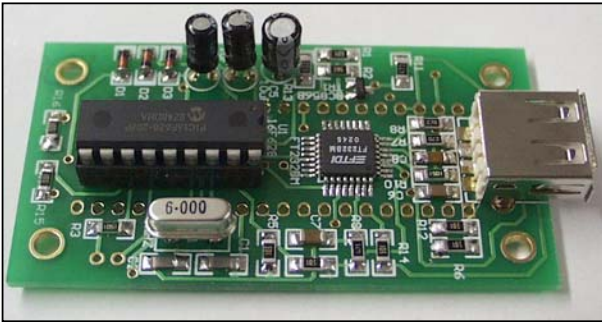
This documentation was written april 27, 2004. It covers the original PCB (USB 'A' connector, and the new V21 PCB with USB 'B' connector & 5-pin ICSP.

Download the User Interface from

<http://www.kitsrus.com/zip/diypack20.zip>

Run setup.exe. The program will unpack to C:\diypgmrn. In there you will find k128.pdf. Please print it out and read in conjunction with this documentation. Read the readme.txt

Here is a photo after soldering the 3 ecaps, crystal, USB connector and 18 pin IC socket for the firmware.

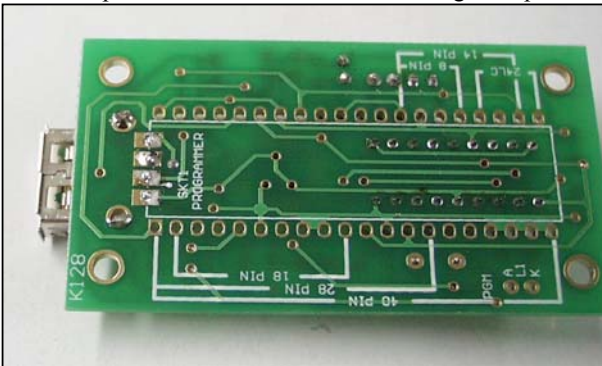


Get the color photo at [www.kitsrus.com/jpg/k128\\_3.jpg](http://www.kitsrus.com/jpg/k128_3.jpg)

Note that the crystal in particular is several mm **above** the PCB. This is so the case will not hit the pads or resistors.

In the original version the two adjacent pins, pins 3 and 4, are both connected to Vcc so the possible solder bridge between these two pins is not a mistake and is OK. In V21 version the connection has been made under the IC.

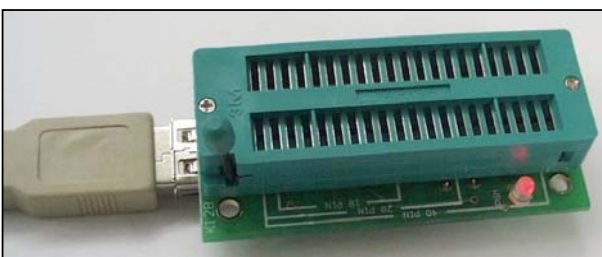
Here is a photo of the other side. Note the lugs and pins



from the USB connector have been **cut off** flush.

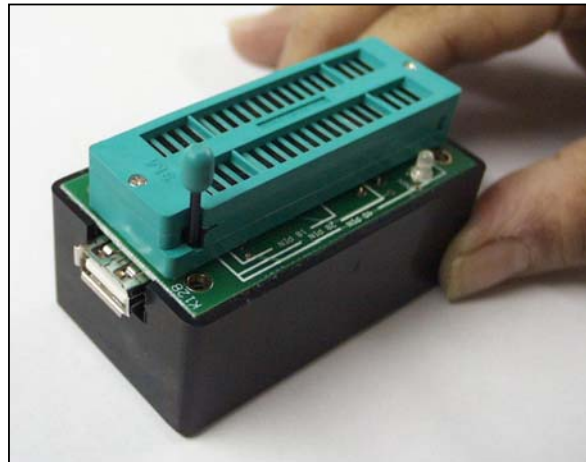
Get the color photo at [www.kitsrus.com/jpg/k128\\_4.jpg](http://www.kitsrus.com/jpg/k128_4.jpg)

Now solder the 3mm bi-LED and ZIF socket into place on



the TOP of the PCB. The short leg of the LED goes in K. **Fitting into the Box.** Our original idea was to screw the PCB into the box provided. However, as you can see the heads of the screws will hit the ZIF socket. So what we have done is made the pcb slightly over-width so some filing will be needed to tight fit the pcb into the box so no screws are required.

A couple of sweeps with a fine file is all that is needed to effect a tight, friction fit of the PCB without screws. Blow off the filed dust. Do **NOT** use a nylon brush as static damage to the FT chip could occur.



For the original version use a USB extension cable, A – A to plug into the PC and the Kit 128. Both A connectors are identical. In V21 use a USB A – B connector.

**Firmware.** The firmware chip supplied with this kit will run with MicroPro.exe from diypack20.zip. Only if you are upgrading from an earlier diypackxx do you need to reprogram the firmware with the supplied diyk128.hex file.

**Software and Firmware Upgrades.** New PICs are being released almost every month. Keep a watch at <http://www.kitsrus.com/upuc.html>

**NOTE:** if you log onto this site and find a later version of diypack.zip then make sure you download **diypack20.zip** and **not the latest version**. After you have the kit working then you can download the latest version, upgrade the firmware and run with the latest MicroPro.exe. You can upgrade by buying and programming a second 628-20/P PIC, or if you have access to a second PIC programmer and reprogram the existing 628 in it.

**PIC16F628A-PI.** Hex files in diypack20 can be programmed into the new 16F628A.

**Problems.** Email me at [peterhk@kitsrus.com](mailto:peterhk@kitsrus.com)

**Photos.** These are for the original version. The latest version has a USB 'B' connector and has a 5-pin header & harness for ICSP programming.