

PIC-KIT3



LOW-COST PROGRAMMER / DEBUGGER

PIC-KIT3 is a low cost programmer/debugger. With its 55 x 55 mm (2.16 x 2.16") dimensions and only 30 grams of weight (excluding the ICSP cable and packing) this little device fits your pocket and is very convenient to carry around when working in field. PIC-KIT3 is a complete replacement of Microchip's original PICKit3 and with it you can do everything you can do with the original PICKit3.

FEATURES

- USB (Full Speed 2 M bits/s) interface to host PC
- Real-time background debugging
- MPLAB and MPLAB X compatible (latest release available for free download from Microchip's web site)
- Built in over-voltage/short circuit monitor
- Firmware upgradeable from PC
- Supports low voltage to 2.0 volts. (2.0 to 6.0 range)
- Diagnostic bi-color LED (Busy, Error)
- External power jack (6-12VDC) for standalone programming
- Programmer-to-go function
- Reading/Writing memory space and EEDATA areas of target microcontroller
- Programs configuration bits
- Erase of program memory space with verification
- Peripheral freeze-on-halt stops timers at breakpoints

DOCUMENTS

PIC-KIT3 user's manual

HARDWARE

PIC ICSP connector(top view)

SOFTWARE

MPLAB-IDE - you can download the latest version from Microchip's web site.

FAQ

- What USB cable do I need?

- You should have a USB type A-B cable to connect to PC, all PC USB hosts have USB-A connector while PIC-KIT3 has USB-B connector so the cable should be USB A-to-B type. Note that such a cable is not included in the package.
- What should I know when connecting PIC-KIT3 to a target board?
- **It's very important that your target PIC MCLR is not connected directly to VCC!**
During programming/debugging MCLR goes as high as 13VDC and if your target MCLR is connected directly to target VCC you will blow either the PIC-KIT3 or the target board. Always use 10K pullup resistor from MCLR to VCC.
- What are the leds for?
- There are two leds – one yellow LED named ACTIVE and one double-color LED named STAT (red/green colors). The yellow LED shows USB activity – e.g. when the device is connected to the USB properly; when you are powering the board from external source via the power jack this LED would blink. The STAT LED shows RED color when you are connected to MPLAB or the image inside the EEPROM is ready for operation. When there is programming data transferred the double LED should blink in orange color (red and green).