

# USB-ICP



## USB-ICP-80C51ISP

### USB In-Circuit Programmer

USB-ICP supports In-System Programming (ISP) on Philips 80C51 Flash based microcontroller families. In-System Programming uses a two-wire serial interface to program and erase ISP enabled microcontroller devices without removing them from the system. The ISP function uses only six pins: VCC, GND, RXD, TXD, PSEN- and RESET. A small connector is all that is needed to interface your ISP application to the USB-ICP programmer.

### *Highlights*

- USB port powered so no external Power Supply required
- Supports USB 2.0
- Plugs directly into any standard USB Port – great for laptops
- Supports Philips' P89C51 Flash family of microcontrollers
- Works with Philips' free Flash Magic software that can be downloaded from the web
- USB-ICP Kit Includes:
  - ◆ USB-ICP dongle
  - ◆ 18" cable allowing direct connection to the user's application
  - ◆ ISP design guide for the user's target board

# Technical Details



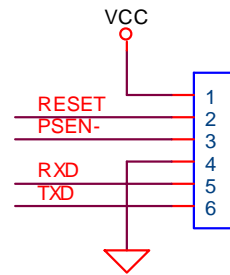
USB-ICP uses a standard RJ-45 for connection to the target cable.

### Indicator LEDs

Green – “Link” Indicates the USB-ICP has been configured by the host PC

Yellow –“ACT” indicates USB Activity (Rx/Tx)

### Target Schematic

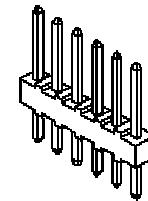


The ISP function uses only six pins: VCC, GND, RXD, TXD, PSEN- and RESET. The simple circuit above is all that must be added to the user’s application to use ISP with USB-ICP.



Example User Target Board (Not Part of Kit)

### Target Connector



The target connector utilized is a standard 0.100” pitch 6-pin header available from numerous

### Example Molex Part Numbers

Part Number	Description
22-03-2061	6pin vertical through hole
68301-1017	6pin vertical surface mount
22-05-2061	6pin right angle through hole

# Ordering Information

Part Number: USB-ICP-80C51ISP  
Price: \$69.00 (USD)  
Order Online Now at [www.teamfdi.com](http://www.teamfdi.com)

Warranty: 30-day money back guarantee  
Availability: Stock

(800) 278-0293 Phone  
(256) 883-1241 FAX  
E-mail: [sales@teamfdi.com](mailto:sales@teamfdi.com)  
[www.teamfdi.com](http://www.teamfdi.com)

USB ICP Family	
Part Number	Supports
USB-ICP-LPC9xx	Philips LPC9xx
USB-ICP-80C51ISP	Philips P89C51 Flash
USB-ICP-LPC2K	Philips ARM7 LPC21xx and LPC22xx

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