# 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



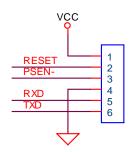
USB-ICP uses a standard RJ-45 for connection to the target cable.

#### **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.





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

| 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

OR www.digikey.com Digi-Key P/N: 622-1001-ND

Warranty: 30-day money back guarantee

Availability: Stock

(800) 278-0293 Phone (256) 883-1241 FAX E-mail: sales@teamfdi.com 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 LPC2xxx |  |

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