# 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



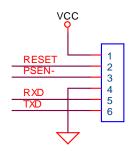
USB-ICP uses a standard RJ-45 for connection to the target cable.

#### **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.

#### **Target Connector**



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 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

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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