USB-ICP

USB-ICP–LPC9xx

USB In-Circuit Programmer

USB-ICP supports the new In-Circuit Programming or ICP mode on NXP Semiconductors microcontroller families such as the LPC9xx. In-Circuit Programming uses a two-wire serial interface to program and erase ICP enabled microcontroller devices without removing them from the system. The ICP function uses only five pins: VCC, GND, PCL, PDA, and RSTn. A small connector is all that is needed to interface your 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 NXP P89LPC900 family of microcontrollers

- Works with NXP 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

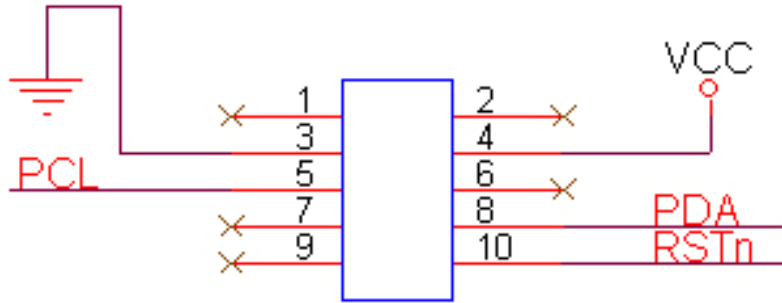   ♦ ICP design guide for the user's target board

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
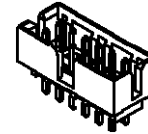
Yellow –"ACT" indicates USB Activity (Rx/Tx)

Target Schematic

The ICP function uses only five pins: VCC, GND, PCL, PDA, and RSTn. The simple circuit above is all that must be added to the user's application to use ICP with USB-ICP.
Note: This is for reference only and should not be used as design information.

Example User Target Board (Not Part of Kit)

Target Connector

The target connector is a standard 2mm pitch, 10-pin, shrouded header available from numerous suppliers. Shrouded connectors should be utilized in order to protect the pins and ensure proper connector insertion.

Example Molex Part Numbers	
Part Number	**Description**
87831-1020	10pin vertical through hole
87832-1020	10pin vertical surface mount
87833-1020	10pin right angle through hole

Ordering Information

Part Number: USB-ICP-LPC9xx
www.digikey.com
Digi-Key P/N: 622-1002-ND
NXP: OM10083
12 NC #: 935281405598

Warranty: 30-day money back guarantee
Availability: Stock

(256) 883-1241 FAX
www.teamfdi.com

USB-ICP Family	
Part Number	**Supports**
USB-ICP-LPC9xx	NXP LPC9xx
USB-ICP-80C51ISP	NXP P89C51 Flash
USB-ICP-LPC2K	NXP ARM7 LPC2xxx

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