

USB-ICP



**Now supports ARM Cortex-M3
LPC17xx Devices**

USB-ICP-LPC2K

USB In-Circuit Programmer

USB-ICP supports In-System Programming (ISP) on NXP's ARM7 LPC2xxx microcontroller family. 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, P0.14 (or P2.10) and RESETn. A small connector is all that is needed to interface your ISP application to the USB-ICP programmer.

SAB-TFBGAXxx adapter boards are also available for devices in 100pin, 180pin, and 208pin TFBGA packages. When used in conjunction with the USB-ICB-LPC2K, these facilitate programming devices in packages that normally are difficult to handle. For more information, visit our website at www.teamfdi.com

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's ARM 7 LPC2xxx microcontroller family
- Uses NXP's free Flash Magic Software - downloaded from the web
- USB-ICP Kit Includes:
 - ◆ USB-ICP dongle
 - ◆ Standard 18" cable allowing direct connection to the user's application
 - ◆ Mini ISP cable for direct programming of ARM7DIMM from ARM Touch Screen LCD Kits, ARM-57TS-LPC2478
 - ◆ 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

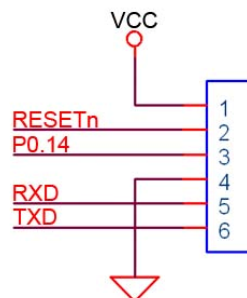
Green – “Link” Indicates the USB-ICP has been configured by the host PC

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



Example User Target Board (Not Part of Kit)

Target Schematic



The ISP function uses only six pins: VCC, GND, RXD, TXD, P0.14 (or P2.10) and RESETn. The simple example circuit above is all that must be added to the user's application to use ISP with USB-ICP. (Consult your specific device datasheet for details on ISP connectivity)

Target Connectors



6-pin 0.1" Header Standard ISP



6-pin 1mm Header Mini-ISP

Example Part Numbers

Part Number	Description
22-03-2061	6pin 0.1" vertical through hole
68301-1017	6pin 0.1" vertical surface mount
22-05-2061	6pin 0.1" right angle through hole
SM06B-SHLS-TF	6pin 1mm right angle Mini-ISP

Ordering Information

Part Number: USB-ICP-LPC2K
Suggested Resale Price: \$79.00 (USD)
Order Online Now at:
www.mouser.com

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	NXP LPC9xx
USB-ICP-80C51ISP	NXP P89C51 Flash
USB-ICP-LPC2K	NXP ARM LPC2xxx & LPC17XX
Other USB-ICP Products	
SAB-TFBGA100	Socket Adapter Bd (LPC2364/68)
SAB-TFBGA180	Socket Adapter Bd (LPC2458)
SAB-TFBGA208	Socket Adapter Bd (LPC2468/78)

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