

# USB-Dongle



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DB-HVSON10-LPC9103

## USB-Dongle and Derivative Boards



The USB-Dongle and Derivative Boards allow quick and easy ICP or ISP programming of many popular NXP Semiconductors microcontroller families such as the LPC9xx, ARM7 LPC2xxx and 89V52X2. The unit also provides a low cost platform for testing or prototyping of simple microcontroller based designs. The USB-Dongle provides a Virtual COM Port interface to the PC and allows hex files to be downloaded and programmed using Flash Magic or other common utilities. The USB-Dongle provides all power needed by the various Derivative Boards so no external power supply is required. Low cost Derivative Boards are available for many different microcontrollers from NXP. Please consult our website for details.

### Highlights

- Low cost tool for prototyping
- Supports many NXP microcontrollers
- USB port powered so no external Power Supply required
- Supports USB 2.0
- Plugs directly into any standard USB Port – great for laptops
- Works with NXP free Flash Magic software that can be downloaded from the web
- USB-Dongle Kit Includes:
  - ◆ USB-Dongle
  - ◆ Download docs and software examples at [www.teamfdi.com/USB\\_Dongle](http://www.teamfdi.com/USB_Dongle)
  - ◆ Derivative Boards for devices or sub-families are optional

# Technical Details

The USB-Dongle uses a standard USB connector to interface to the USB port on any PC.

### Indicator LED

Slow Blinking – Error  
Fast Blinking – Activity  
On Steady - Ready

## Target Interface

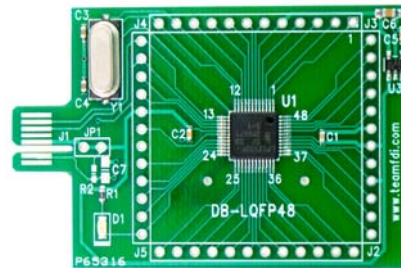
The USB-Dongle includes a 14 pin connector to the Derivative Board that utilizes the following signals:

ISP/ICPn	5V (USB power, unswitched)
Switched Power (3V for ICP) or Reset (High True for 8051 ISP)	Reset (Low True) (for ICP & LPC2000 ARM)
Ground	3V (unswitched)
PCL/SCL (ICP/I2C)	PDA/SDA (ICP/I2C)
TXD (UART)	RXD (UART)
MSIO (SPI)	PSEN/P0.14 (ISP entry)
SCLK (SPI)	MOSI (SPI)

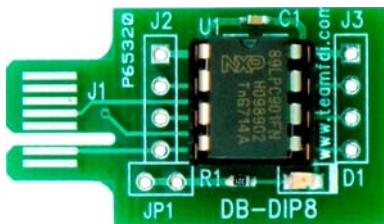
## Derivative Board Examples



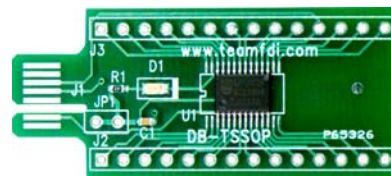
DB-TSSOP-SKT



DB-LQFP48-LPC2103



DB-DIP8-LPC901



DB-TSSOP-LPC922

# Ordering Information

Order Online at [www.digikey.com](http://www.digikey.com)

Availability: Stock  
Digi-Key Contact Info:  
1-800-DIGI-KEY Phone  
(218) 681-3380 FAX

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

Derivative Board Family			
Digi-Key P/N	FDI P/N	Supported Device(s)	Price
622-1007-ND	USB-DONGLE	All	17.00
622-1008-ND	DB-HVSON10-LPC9103	P89LPC9103	5.00
622-1009-ND	DB-DIP8-LPC901	P89LPC901	5.00
622-1010-ND	DB-TSSOP-LPC922	P89LPC922	6.00
622-1011-ND	DB-TSSOP-LPC938	P89LPC938	6.00
622-1012-ND	DB-TQFP44-89V52X2	P89V52X2	7.50
622-1013-ND	DB-LQFP48-LPC2103	ARM7 LPC2103	7.50
622-1014-ND	DB-TSSOP-SKT	14-28 pin LPC9xxx	49.00

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