USB-Dongle





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/USBDongle

 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

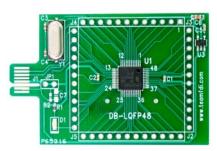
The USB-Dongle includes a 14 pin connector to the Derivative Board that utilizes the following signals:

| ISP/ICPn | ISP/ICPn 5V (USB power, unswitched) | |
|--------------------------------|--------------------------------------|--|
| Switched Power (3V for ICP) or | wer (3V for ICP) or Reset (Low True) | |
| Reset (High True for 8051 ISP) | (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



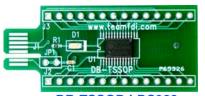
DB-TSSOP-SKT



DB-LQFP48-LPC2103



DB-DIP8-LPC901



DB-TSSOP-LPC922

Ordering Information

Order Online at www.digikey.com 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

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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