



Development Tools for ARM Microcontrollers

LPC21xx Evaluation Board

The Keil MCB2100 Evaluation Board introduces you to the NXP LPC2100 ARM family and allows you to create and test working programs for this advanced architecture. Two CAN and two serial interfaces are available. Debugging is supported via the JTAG interface and the Keil ULINK USB-JTAG adapter. An evaluation copy of the Keil ARM development tool is included. **Applications:** LPC2129/2119/2124/2114 product families **Includes:** • Evaluation Kit for LPC2100 (with LPC2129) • ULINK JTAG Debugger • Development Software **568-1755-ND** Evaluation Board/ULINK JTAG LPC210XARM **\$337.50**

LPC2106 Evaluation Board

The evaluation board is populated with an LPC2106 device and features 2 serial ports, 2 user-defined buttons, 16 fully configurable LEDs, 20-pin JTAG interface connector as well as breakout headers for all pins. The kit also comes with a 32K code-limited version of IAR's Embedded Workbench, including IAR's ARM compiler and C-SPY debugger as well as a free license of the IAR MakeApp code generator for the LPC210x. **Applications:** LPC2106 family **Includes:** • Development board (with LPC2106) • Development Software **568-1756-ND** Evaluation Board for LPC210x ARM MCU **\$163.50**

LPC213x Evaluation Board

The Keil MCB2130 Evaluation Board introduces you to the NXP LPC2130 ARM family and allows you to create and test working programs for this advanced architecture. Two serial interfaces, a speaker, analog input (via potentiometer), and eight LEDs are available. Debugging is supported via the JTAG interface and the Keil ULINK USB-JTAG adapter. An evaluation copy of the Keil ARM development tools is included. **Applications:** LPC213x family **Includes:** • Development Board (with LPC2138) • Development Software **568-2095-ND** Evaluation Board for LPC213x **\$163.50**
568-2096-ND Evaluation Board + ULINK LPC213x **\$337.50**

LPC214x Evaluation Board

The Keil MCB2140 Evaluation Board introduces you to the NXP LPC2140 ARM family and allows you to create and test working programs for this advanced architecture. An on-chip USB interface, two serial interfaces, a speaker, analog input (via potentiometer), and eight LEDs are available. Debugging is supported via the JTAG interface and the Keil ULINK USB-JTAG adapter. An evaluation copy of the Keil ARM development tools is included **Applications:** LPC214x family **Includes:** • Development Board (with LPC2148) • Development Software **568-2097-ND** Evaluation Board for LPC214x **\$163.50**

LPC229x Rapid Development Kit

The phyCORE®-ARM7/LPC229x Rapid Development Kit supports high-performance LPC2292 and LPC2294 ARM7TDMI-S devices from NXP with external bus interface. PHYTEC Rapid Development Kits enable immediate and successful start-up of our insert-ready Single Board Computers. **Applications:** LPC2292 and LPC2294 families **Includes:** • Single Board Computer Module • Development Board • Ethernet Adapter • Serial Cable • AC adapter • PHYTEC Spectrum CD including SBC hardware manual, evaluation compiler, software demos and controller user manual **568-1757-ND** Evaluation Board for LPC220x ARM MCU **\$343.50**

LPC23xx Evaluation Board

The Keil MCB23XX Evaluation Board introduces you to the NXP LPC2300 ARM7-based family and allows you to create and test working programs for this advanced architecture. Two serial interfaces, a speaker, analog input, two CAN interfaces, LCD, USB, Ethernet, and eight LEDs make this board a great starting point for your next ARM project. **Applications:** LPC23xx family **Includes:** • Evaluation Board • Software **568-3999-ND** Evaluation Board LPC237x **\$223.50**
568-4014-ND Evaluation Board LPC236x **\$223.50**

LPC3180 Development Kit

The phyCORE®-ARM9/LPC3180 module, combined with the PHYTEC Carrier Board, provide a platform to jump start embedded designs and propel concept to prototype and finished product. **Includes:** • Single Board Computer Module • Carrier Board • Serial Cable, USB cable, AC Adapter • PHYTEC Spectrum CD • Hardware Manual • Evaluation Compiler • Software demos • Controller User's Manual **568-4063-ND** LPC3180 Development Kit **\$448.50**

ARM7 Evaluation Boards by Keil

The Keil Evaluation Board introduces you to the NXP LPC ARM family and allows you to create and test working programs for this advanced architecture. The Keil Evaluation Board connects to your PC using the serial port or the JTAG interface (for program debug using the Keil ULINK USB-JTAG Adapter and the uVision IDE and Debugger). **Includes:** • LPC Evaluation Board • Software **568-4300-ND** Evaluation Board for LPC210x **\$105.00**
568-4297-ND Evaluation Board for LPC212x **\$163.50**

IAR Kickstart Kit™ for LPC2103

The IAR KickStart Kit for LPC2103 contains hardware and software and allows you to design, develop, integrate and test your applications. **LPC2103 Development Board Contains:** • 2 UARTS with drivers and DB9 connectors • ETM Routing • Potentiometer connected to the ADC • 2 x 16 LCD • JTAG Interface **Includes:** • Development Board • IAR Embedded Workbench with 32kB version of IAR C/C++-Compiler. **568-4301-ND** LPC2103 Development Board **\$163.50**
568-4302-ND LPC2103 Development Kit with on-board JLink **\$118.50**

IAR Kickstart Kit for LPC2138

The IAR KickStart Kit for LPC2138 contains hardware and software and allows you to design, develop, integrate and test your applications. **LPC2138 Development Board Contains:** • 2 UARTS with drivers and DB9 connectors • ETM Routing • Potentiometer connected to the ADC • 2 x 16 LCD • JTAG Interface **Includes:** • Development Board • IAR Embedded Workbench with 32kB version of IAR C/C++-Compiler. **568-4298-ND** LPC2138 Development Board **\$163.50**
568-4299-ND LPC2148 Development Board **\$163.50**

IAR Kickstart Kit™ for LPC2378

The IAR KickStart Kit for LPC2378 contains hardware and software and allows you to design, develop, integrate and test your applications. **LPC2378-SK Development Board Contains:** • SD/MMC Card Connector • Jumpers for ISP/RUN mode • 2 User Buttons • USB Connector • Color LCD. **Includes:** • On-Board J-Link debugger • Development Board • IAR Embedded workbench with 32kB version of IAR C/C++-Compiler **568-4307-ND** LPC2378 Development Kit with On-Board JLink **\$298.50**

LPC2158 LCD Demo Kit

The LCDDemo-LPC2158 is a reference design for a low cost microcontroller and LCD solution using the NXP LPC2158 along with a few discrete external components. The board is controlled by a simple two-button user interface (mode and select). The LCDDemo-LPC2158 can function as a single board computer since the powerful LPC2158 contains an ARM7TDMI-S microcontroller with 512kB of programmable flash memory and 40kB of RAM. Additionally, the 20-pin expansion header allows for the connection of external devices to the microcontroller directly through GPIO or through the SPI and I²C interfaces. **Includes:** • LCDDemo-LPC2158 Board • QuickStart Guide • Software. **568-4310-ND** LPC2158 LCD Demo Kit **\$66.00**

LPC2468 Evaluation Board by Embedded Artists

Embedded Artists' LPC2468 OEM Board (mounted on the OEM base board basic) lets you get up-and-running quickly with NXP's ARM7TDMI LPC24xx microcontroller series in general and with LPC2468 in particular. The board is only 66 x 80mm and is perfect for running uClinux with large on-board RAM and Flash. All processor signals are available on two 100-pin connectors for easy expansion. **Includes:** • LPC2468 OEM Board • OEM Base Board Bundle. **568-4303-ND** LPC2468 Evaluation Board (Embedded Artists) **\$298.50**
568-4358-ND **NEW!** QVGA TFT Display **\$127.50**

NEW! LPC2387 Evaluation Board

The Keil MCB2387 Evaluation Board introduces you to the NXP LPC2387 microcontroller. It allows you to create and test working programs for this advanced architecture. The MCB2387 includes RealView MDK-ARM Evaluation Tools. These tools help you get started writing programs and testing the microcontroller and its capabilities. Sample applications which run on the MCB2387 are included. **Includes:** • MCB2387 Evaluation Board populated with LPC2387 • RealView MDK-ARM Software • Quick Start Guide **568-4359-ND** LPC2387 Evaluation Board **\$270.00**

NEW! LPC2900 Evaluation Board

The Keil MCB2900 Evaluation Board introduces you to the NXP LPC2900 ARM family and allows you to create and test working programs for this advanced architecture. Two Serial and two CAN interfaces make this board a great starting point for your next ARM project. **Includes:** • MCB2900 Evaluation Board • RealView MDK-ARM Software **568-4360-ND** LPC2900 Evaluation Board **\$270.00**

NEW! LPC2478 Evaluation Board by Embedded Artists

Embedded Artists' LPC2478 OEM Board (mounted on the QVGA OEM Base Board with touch panel) lets you get up-and-running quickly with NXP's ARM7TDMI LPC24xx microcontroller series in general and with LPC2478 in particular. The OEM board has SODIMM format and is only 66 x 48mm and is perfect for running uClinux with large on-board RAM and FLASH. All processor signals are available on the 200 pin connector for easy expansion. **Includes:** • LPC2478 OEM Board • QVGA Base Board with touch panel **568-4369-ND** LPC2478 Evaluation Board **\$478.50**

LPC2468 Evaluation Kit by Hitex

The LPC-Stick is a small modular evaluation kit with optional extension boards. The LPC-Stick package provides target hardware with the LPC2468 microcontroller from NXP, external SRAM, user pins and LEDs for application use. Combined with the proven USB debugger device connection and the non-limited HITOP development tools, the LPC-Stick allows full access to all chip features, debugging and programming. To provide access to the most external capabilities of the LPC2468 chip, the stick allows to connect diverse extension boards over an 80-pin extension connector. The toolset does not require any power supply or cables, just install the tools and run the demo application! Debugging and user communication via USB at the same time! The extension connector allows the connection to accessory extension boards. Available accessory kits are: COM board extension provides a set of communication features and pinouts (Ethernet and Phy, USB Host and Device, UART, SDCard, CAN Phy, external power). **568-4308-ND** LPC-Stick with LPC2468 **\$82.50**
568-4309-ND Extension Board for LPC-Stick **\$118.50**

Bluestreak Evaluation Kits by LPD

The ZOOM™ Starter Development Kit (SDK) is a high-performance application development kit for evaluating the functionality of the System On Module Card Engine and associated processor. Application development is performed right on the product-ready card engine and software Board Support Packages included in the kit, which enables you to seamlessly transfer your application code and hardware into production. The card engine is ideal for applications in the medical, point-of-sale, industrial, and security markets. **568-4304-ND** ZOOM SDK for LHT7404 **\$636.00**
568-4305-ND ZOOM SDK for LHT7924 **\$636.00**
568-4306-ND ZOOM SDK for LHT75401 **\$381.00**

Development Tools for LPC900

MCB900 Evaluation Board

The Keil MCB900 Evaluation Board is a versatile and flexible prototype board for the NXP P89LPC93x microcontroller family. The MCB900 includes the Keil µVision2 LPC Development Studio which allows you to create and debug programs that you can program into the on-chip Flash ROM using FlashMagic. **Applications:** P89LPC93x family **Includes:** • MCB900 Evaluation Board (with P89LPC932) • µVision2 LPC Development Studio **568-1758-ND** Eval Board for LPC93x MCU Family **\$75.00**

EPM900 In-Circuit Debugger/Parallel Programmer

The Keil EPM900 Emulator supports in-circuit debugging and parallel Flash ROM programming for the NXP P89LPC93x device family. The EPM900 connects directly to the µVision2 Debugger which provides full control over the user program execution. The Keil EPM900 Emulator includes the µVision2 LPC Development Studio which contains all the tools you need to generate small LPC applications. **Applications:** P89LPC93x family **Includes:** • EPM900 Emulator Board • µVision2 LPC Development Studio • USB Cable **568-1759-ND** Emulator Debugger/Programmer LPC9x **\$223.50**

PDS900 Emulator / Programmer

The PDS900 is a fully featured in circuit emulation and programming system supporting the entire NXP P89LPC900 family of high performance microcontrollers. It allows complete control and tracing of execution of a users program and access to all registers and memory spaces of the target microcontroller, without consuming any device resources or introducing wait-states or other non-standard behavior. It also allows programming of the Flash program memory and configuration options of production microcontroller devices **Applications:** P89LPC93x family **Includes:** • PDS900 emulation and programming system • Emulation footprint adapters for TSSOP20, TSSOP28 and PLCC28 packages **568-1760-ND** Emulator Programmer LPC9x MCU **\$673.50**

Debuggers

U-LINK2 Debugger

The Keil ULINK2 USB-JTAG Adapter connects your PC's USB port to the target hardware (via JTAG, SWD, or OCDs) and allows you to debug embedded programs running on target hardware. ULINK2 offers all the features of the original ULINK USB-JTAG Adapter and adds serial wire debug (SWD) support, return clock support, and a real-time agent. ULINK2 works with standard Windows USB drivers. **568-4061-ND** U-LINK2 Debugger **\$253.50**

J-Link Debugger

The IAR J-Link is a JTAG debugger that connects via USB to the PC host running Windows. IAR J-Link integrates seamlessly into IAR Embedded Workbench for ARM and is fully plug-and-play compatible. **Features:** • Support for all ARM7/ARM9 cores, including Thumb mode • DCC speed up to 800kB/sec • Automatic core recognition • Auto speed recognition **Includes:** • USB • 20-pin flat cable **568-4062-ND** J-Link Debugger **\$253.50**

I²C Development Tools

I²C/SPI-to-UART Demo Board

The NXP I²C/SPI-to-UART demo board demonstrates the SC16IS752 series of bridge ICs which provide high-speed serial data communications between an SPI or an I²C-host and a UART device via RS-232/RS-485 while providing IrDA and GPIO interfaces. The demo board features the SC16IS752 I²C/SPI slave-to-UART/IrDA/GPIO bridge, an NXP P89LPC935 microcontroller, which controls the bridge IC, an IrDA module for wireless communication and LEDs connected to the GPIO. **Includes:** • Demo Board • Cable • User Manual **568-4000-ND** I²C/SPI-to- Dual UART Demo Board **\$97.50**

PCA9564 Demo Board

The PCA9564 Evaluation Board demonstrates the I²C bus controllers ability to interface between a master (connected to its parallel bus and its control signals) and any master and slave devices connected to its I²C bus. The evaluation board is populated with the following devices and functions: An external 9V DC power supply is used to provide power to the 3.3V on-board voltage regulator. The P89LPC932 and P89LV51 are both limited to a 3.3V supply voltage. **Includes:** • Demo Board • Power Supply **568-4001-ND** PCA9564 Demo Board **\$34.50**

I²C Master Demos

The I²C 2002-1A Evaluation Board is a low-cost I²C-based system that allows designers to use their PC to easily test and demonstrate new I²C devices in a platform that allows multiple operations to be performed in a setting similar to a real system environment. **Includes:** • I²C 2002-1A Evaluation Board • I²C PORT V2 Adapter Card • USB Adapter Card • Power Supply • Software **568-4002-ND** I²C Master Demo Board **\$240.00**

LED Dimmer Demo Board

The NXP LED Dimmer Demo Board makes it quick and easy to demonstrate keypad control as well as LED lighting and color mixing. Built around the NXP 8-bit microcontroller P89LV51R2D and an NXP I²C-bus controller PCA9564, the board uses embedded software to run demonstrations on its own, without additional hardware or software. Optimized for use in mobile phones, the microcontroller is equipped with firmware that emulates a cellular handset. Engineers can program a variety of light patterns and control the brightness of a virtual display. The firmware can also be used to emulate a battery-discharge display. **Includes:** • Demo Board • Software **568-4003-ND** LED Dimmer Demo Board **\$34.50**

More Product Available Online: www.digikey.com

Toll-Free: 1-800-344-4539 • Phone 218-681-6674 • Fax: 218-681-3380