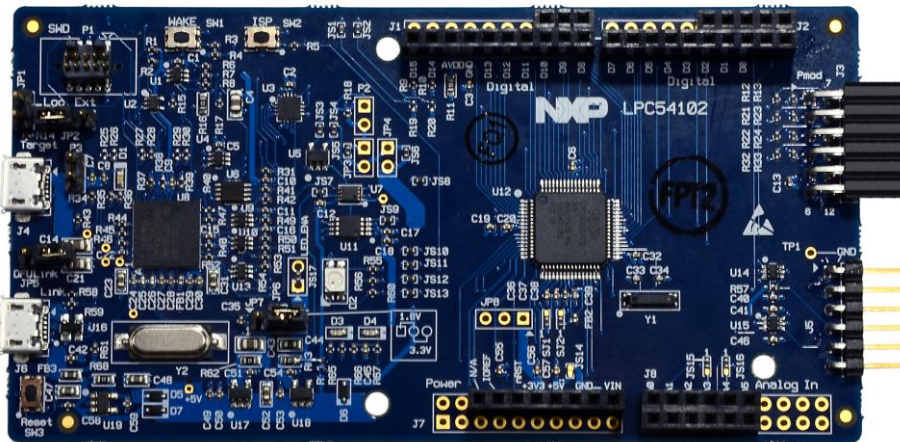


The LPCXpresso family of boards provides a powerful and flexible development system for NXP's Cortex-M MCUs. The LPCXpresso54102 board has been developed by NXP to enable evaluation of and prototyping with the LPC54100 family of MCUs, and features the LPC54102 in its LQFP64 package option.



### Feature summary

The LPCXpresso54102 board includes the following features:

- On-board high-speed USB based debug probe with CMSIS-DAP and LPCXpresso IDE Redlink protocol options, can debug on-board LPC54102 or external target
- Support for external debug probes
- Tri-color LED
- Target Reset, ISP and WAKE buttons
- Expansion options based on Arduino UNO and Pmod™, plus additional expansion port pins
- On-board 1.8/3.3V or external power supply options
- Built-in MCU power consumption and supply voltage measurement
- UART, I<sup>2</sup>C and SPI port bridging from LPC54102 target to usb via the on-board debug probe
- FTDI UART connector

### LPCXpresso IDE

LPCXpresso IDE supports programming and debugging LPCXpresso boards using the on-board CMSIS-DAP debug interface, or with an external debug probe such as LPC-Link2. LPCXpresso54102 is ready for use with the LPCXpresso IDE. An external debug probe can be used by simply connecting it to the board via the P1 connector and powering the board via the J3 usb connection.

### Partner development tools

The LPCXpresso54102 board can be used with development tools from NXP partners including Atollic, Keil, IAR, Mentor Graphics, Rowley and SEGGER. The board is pre-programmed with CMSIS-DAP firmware, so can also be used with these toolchains by setting the on-board debug probe to boot from flash (removing the JP3 jumper). Please refer to our partners for details on using their tools with the board.

### LPCOpen drivers and examples

The LPCOpen Platform allows users to quickly and easily utilize NXP's extensive array of microcontroller software libraries to create and develop multifunctional products. Drivers for the LPCXpresso54102 board can be downloaded for free at <http://www.lpcware.com/lpcopen>.

### Board specifications

Recommended operating conditions: 0 to 70°C ambient

Weight: 1.1 ounces

Size: 123 x 59mm (4.8 x 2.3 inches) including connectors

The LPCXpresso54102 board is RoHS compliant.