



# LPC810 and LPC830: 32-Bit Arm® Cortex®-M0+-Based Low-Cost MCU

## LPC81X\_LPC83X

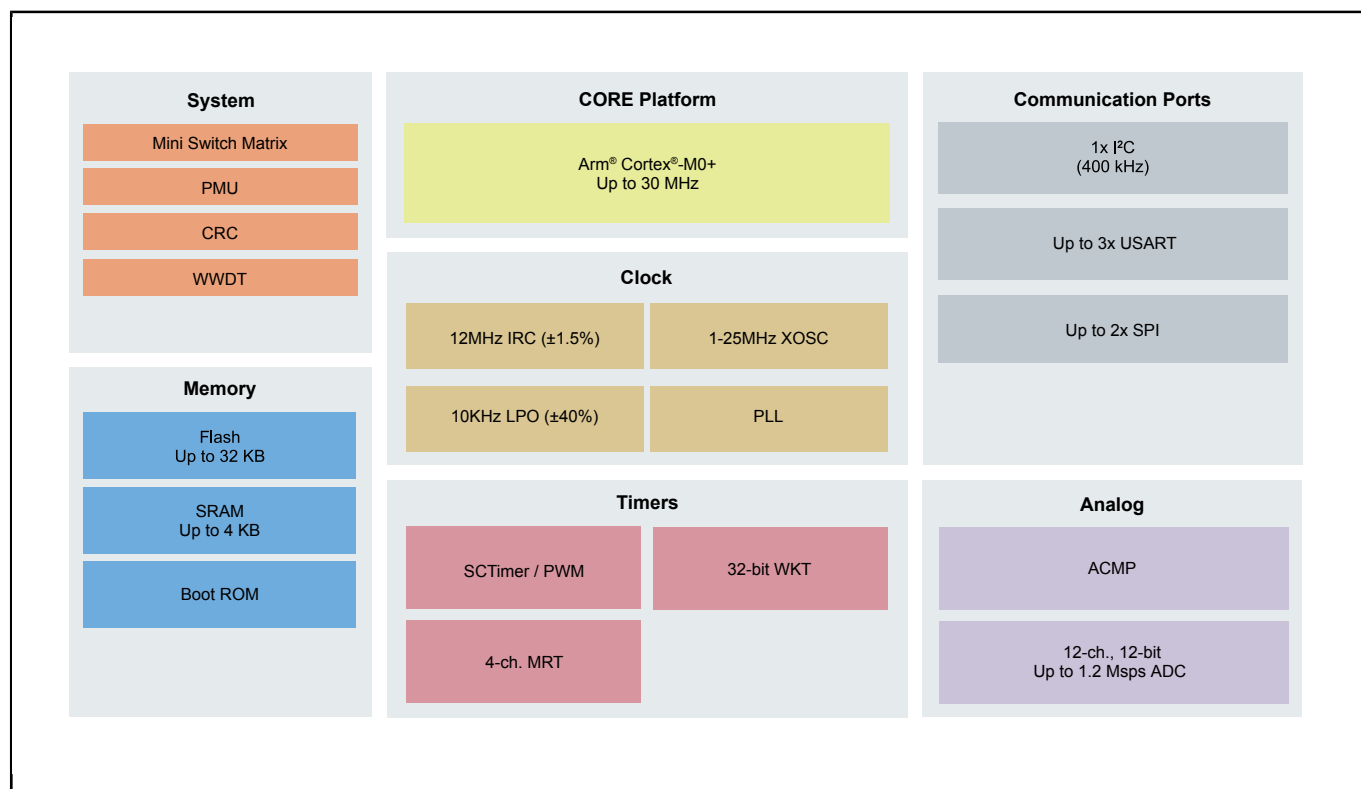
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The LPC81x MCU family provides an optimal entry point into the low-cost LPC800 series. This family balances a range of versatile timing, connectivity, and analog peripherals while delivering it in a low pin count easy to use package. This family provides three select peripherals to ease the transition into the 32-bit space. The switch matrix provides designers the flexibility to map pins accordingly to simplify component routing on a PCB. Another ability of this family comes through the use of the SCTimer, which can be configured to generate a variety of timing or PWM waveforms without the intervention from the CPU. To simplify serial communication requirements, the pattern match engine can be configured to generate interrupts from user configurable Boolean operations on it is 8 pins.

The LPC800 series shares critical pinouts through the range of subfamilies and packages and customers can easily swap or scale packages and subfamilies as their needs change. The LPC83x family builds on the functionality of the LPC81x by increasing its flash size and adding a 12-bit ADC with sample rates of up to 1.2 Msps.

This device is fully supported by NXP's [MCUXpresso Software and Tools](#), a comprehensive and cohesive set of free software development tools for Kinetis, LPC and i.MX RT microcontrollers. MCUXpresso SDK also includes project files for Keil MDK and IAR EWARM.

## LPC81x and LPC83x MCU Block Diagram



View additional information for [LPC810 and LPC830: 32-Bit Arm® Cortex®-M0+-Based Low-Cost MCU](#).

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