



# LPC820: 32-Bit Arm® Cortex®M0+–Based Low-Cost MCU

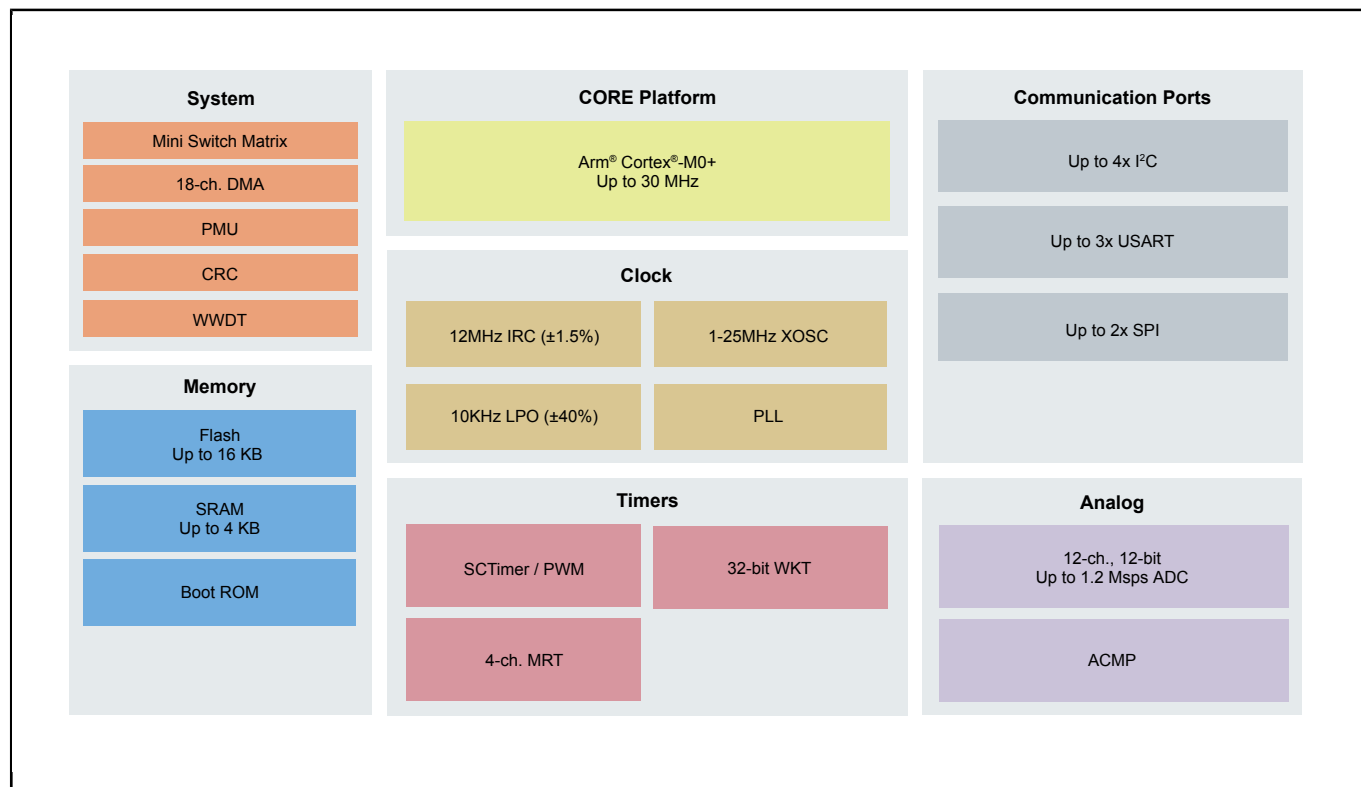
## LPC82X

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The LPC82x MCU family provides higher integration over the LPC81x MCU family with a larger memory footprint, doubling maximum flash and SRAM size, an 18-ch DMA, addition of more I2C serial interfaces and a 12-bit 1.2Msps ADC. this family provides three select peripherals to ease 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 its 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.

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.

## LPC82x MCU Block Diagram



View additional information for [LPC820: 32-Bit Arm® Cortex®M0+-Based Low-Cost MCU](#).

**Note:** The information on this document is subject to change without notice.

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