



# Power-Efficient Microcontrollers (MCUs) With Advanced Peripherals Based on Arm® Cortex®-M4 Core

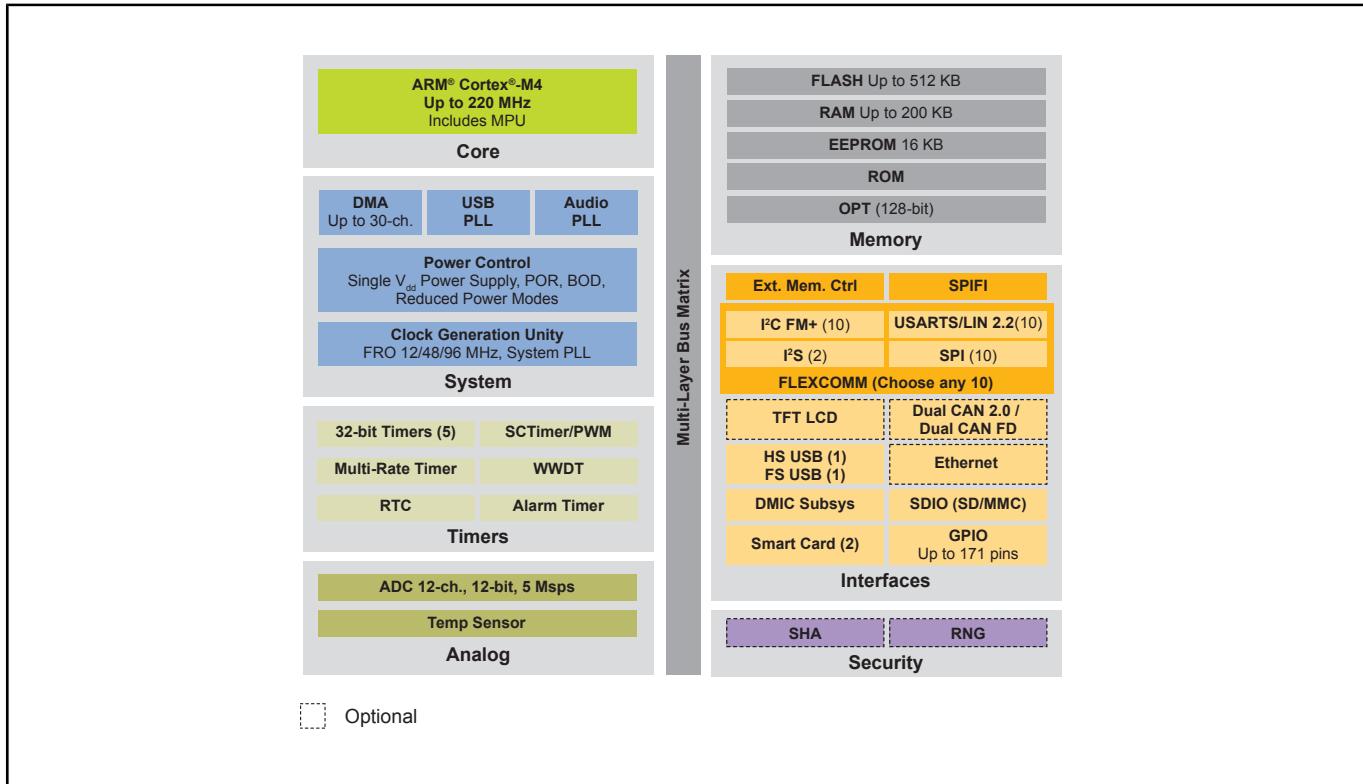
## LPC546XX

Last Updated: Dec 23, 2025

The LPC546xx MCU family combines the power efficiency of the 220 MHz Arm® Cortex®-M4 core with multiple high-speed connectivity options, advanced timers, and analog features. DSP capabilities enable LPC546xx MCU devices to support complex algorithms in data-intensive application. Providing flexibility with up to 512 KB Flash and external memory interfaces, this family provides the ability to adapt as requirements change. Flash options support large, flexible internal and external memory configurations. Compatibility within the LPC54000 series enables the LPC546xx MCU family to provide a seamless migration path for increasing processing power and adding the flexibility of additionally advanced peripherals.

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.

## LPC546xx MCU Block Diagram



View additional information for [Power-Efficient Microcontrollers \(MCUs\) With Advanced Peripherals Based on Arm® Cortex®-M4 Core](#).

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

---

**www.nxp.com**

NXP and the NXP logo are trademarks of NXP B.V. All other product or service names are the property of their respective owners. The related technology may be protected by any or all of patents, copyrights, designs and trade secrets. All rights reserved. © 2026 NXP B.V.