



Kinetis® K12–50 MHz, Microcontrollers (MCUs) with Optimized Features based on Arm® Cortex®–M4 Core

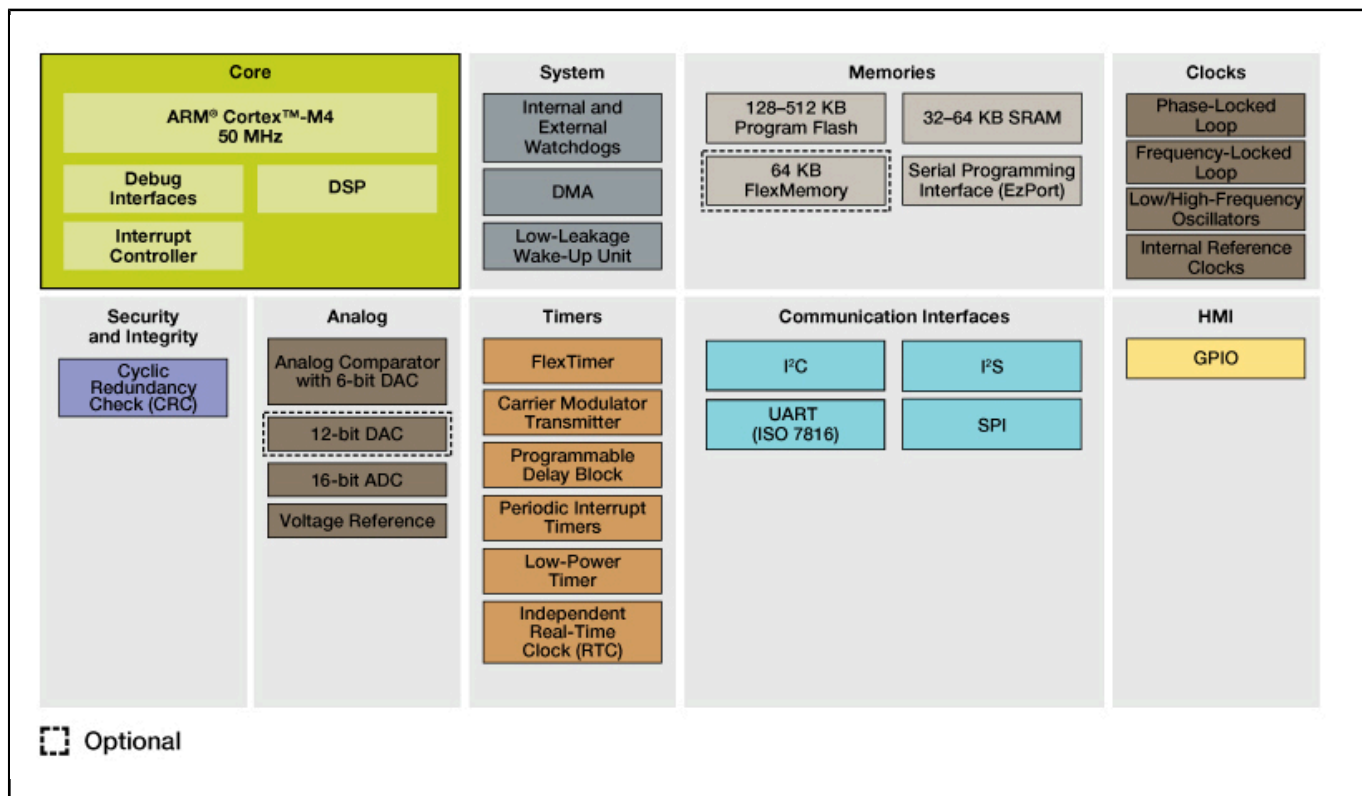
K12_50

Last Updated: Mar 5, 2025

The Kinetis® K12 50 MHz family of baseline MCUs targets cost-sensitive applications requiring low power and processing efficiency.

- Includes robust analog, communication, control and timing peripherals
- Provides upgrade from mechanical to touch keypad, rotary and slider interfaces
- Operates in all low-power modes with minimal current added
- Supports multiple communication interfaces for efficient data exchange, industrial network bridging and audio system interfacing
- Reduces overall system cost by eliminating the need for external voltage reference
- Secures data transfer and storage
- Shares the Kinetis portfolio's scalability and comprehensive development support

Kinetis K12 50 MHz Baseline MCUs Block Diagram Block Diagram



View additional information for [Kinetis® K12-50 MHz, Microcontrollers \(MCUs\) with Optimized Features 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. © 2025 NXP B.V.