



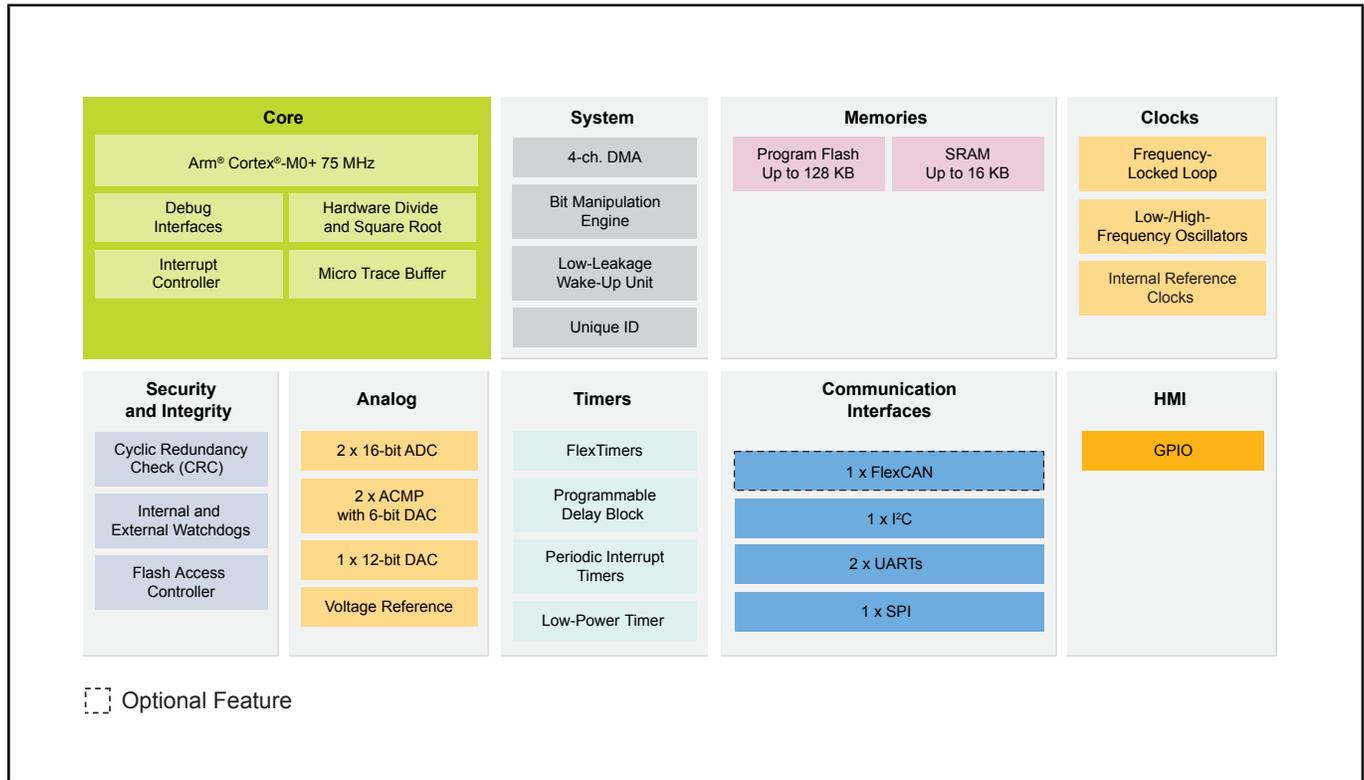
# Kinetis® KV1x-75 MHz, Entry-Level 3ph FOC / Sensorless Motor Control MCUs based on Arm® Cortex®-M0+

## KV1x

Last Updated: Dec 16, 2024

The Kinetis® KV1x MCU family is the entry point of the V series. Built upon the Arm® Cortex®-M0+ core running at 75 MHz with hardware square root and divide capability, it delivers a 27% increase in performance in math-intensive applications versus comparable MCUs, allowing it to target BLDC as well as more computationally demanding PMSM motors. Additional features include integrated FlexCAN, dual 16-bit analog-to-digital controllers (ADCs) sampling at up to 1.2 mega samples per second (MS/s) in 12-bit mode, multiple motor control timers, up to 128 KB of flash memory and a comprehensive enablement suite from NXP® and third-party resources, including reference designs, software libraries and motor configuration tools.

# KV1x MCU Block Diagram



View additional information for [Kinetis® KV1x-75 MHz, Entry-Level 3ph FOC / Sensorless Motor Control MCUs based on Arm® Cortex®-M0+](#).

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

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