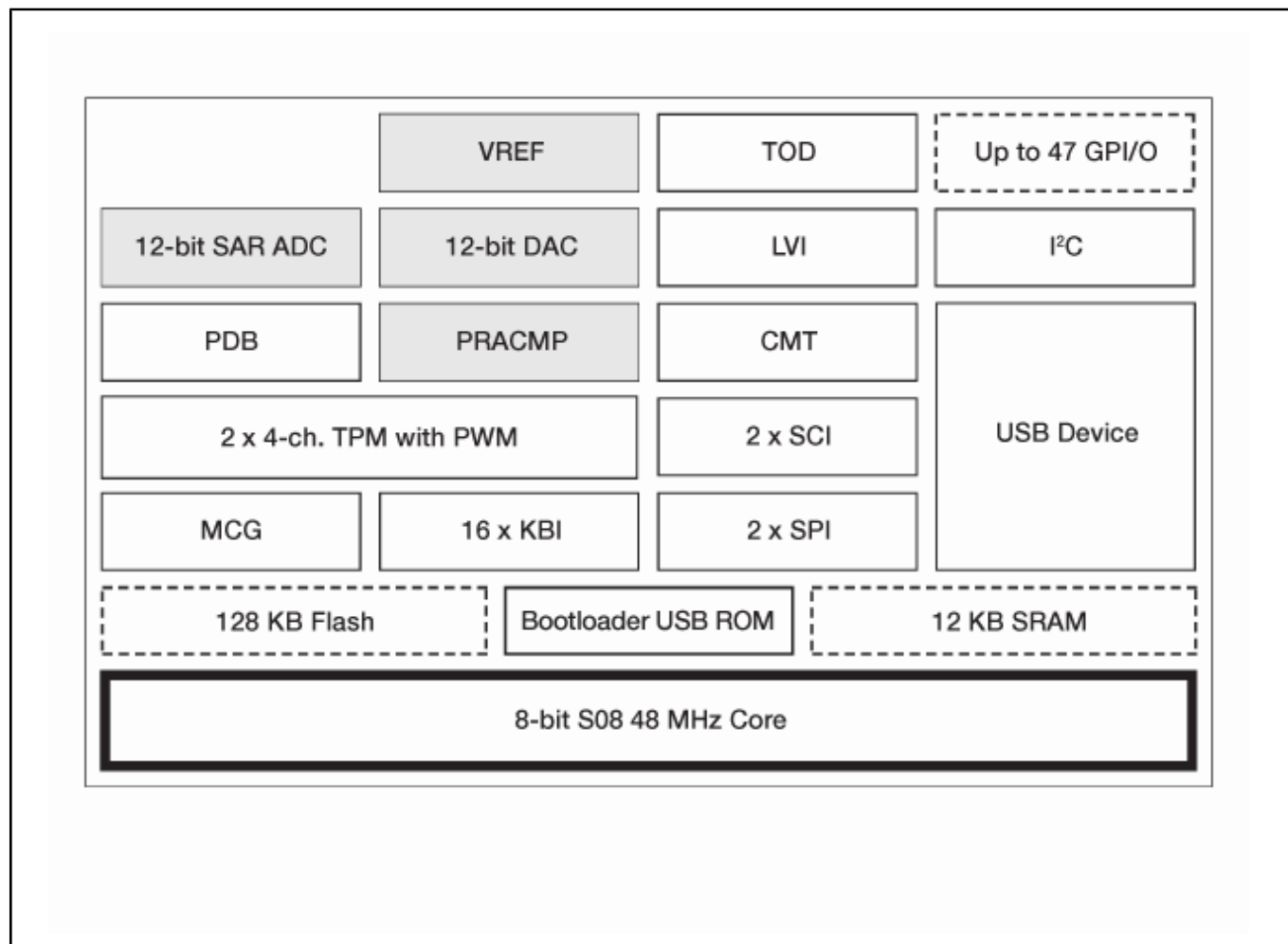# 8-bit Flexis USB JE MCUs

## S08JE

Last Updated: Mar 5, 2025

The MC9S08JE128/64 (JE128/64) provides ultra-low-power operation, USB connectivity and high measurement accuracy, all in a single 8-bit microcontroller to allow designers to develop a more fully featured and cost-effective system. The JE128/64 integrates high-resolution analog-to-digital converter (ADC) and digital-to-analog converter (DAC) modules, a rich peripheral set including a USB 2.0 device controller and multiple serial interfaces.

The JE128/64 is part of the Flexis microcontroller series, which includes both 8-bit S08 and 32-bit V1 ColdFire® microcontrollers that have a common set of peripherals and development tools for migration flexibility. The JE128/64 family is also easy to use and NXP® provides a comprehensive suite of development tools and software to help developers design quickly and easily.

# S08JE Microcontroller Block Diagram Block Diagram

| | | | |
|---|---|---|---|
| | VREF | TOD | Up to 47 GPI/O |
| 12-bit SAR ADC | 12-bit DAC | LVI | I²C |
| PDB | PRACMP | CMT | |
| 2 x 4-ch. TPM with PWM | | 2 x SCI | USB Device |
| MCG | 16 x KBI | 2 x SPI | |
| 128 KB Flash | Bootloader USB ROM | 12 KB SRAM | |
| 8-bit S08 48 MHz Core | | | |

View additional information for 8-bit Flexis USB JE MCUs.

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