



DSCs with Integrated FPU and Trigonometric Math Engine with OPAMP and Quadrature Decoder

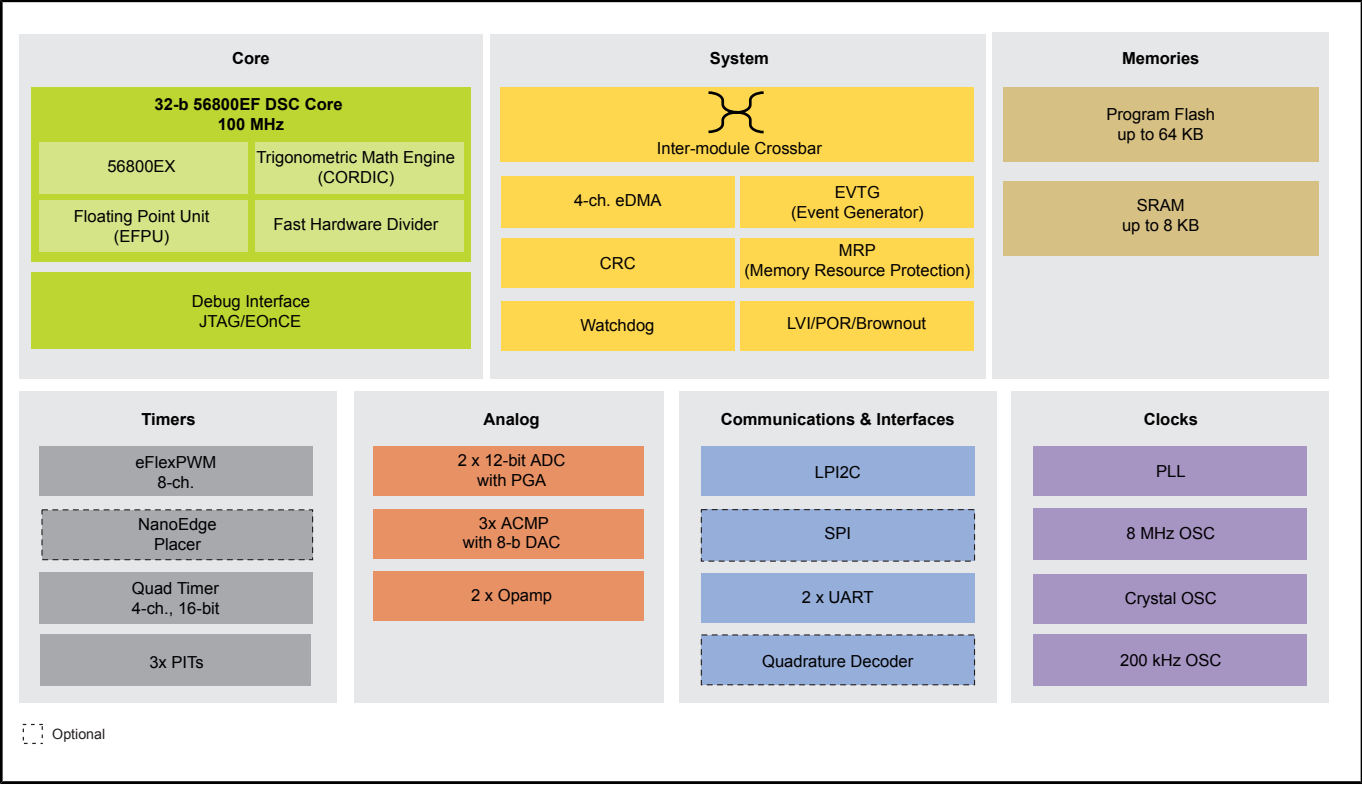
MC56F80xxx

Last Updated: Dec 15, 2024

The MC56F80xxx is a digital signal controller (DSC) family based on the high-performance 100 MHz 56800EF DSP core. This DSC family has an integrated FPU and CORDIC / trigonometric math engine that provides high-performance, cost-effective solutions for digital power conversion and motor control applications.

This MC56F80xxx combines the processing power of a DSP and the functionality of an MCU with a flexible set of peripherals to support different applications. It includes advanced high-speed and high-accuracy peripherals such as 8 channel eFlexPWM with 312 ps resolution, dual high-speed 12-bit ADCs, two operational amplifiers, a quadrature decoder and three analog comparators.

MC56F80xxx MCUs Block Diagram



View additional information for [DSCs with Integrated FPU and Trigonometric Math Engine with OPAMP and Quadrature Decoder](#).

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