



MC56F826xx and MC56F827xx Digital Signal Controllers

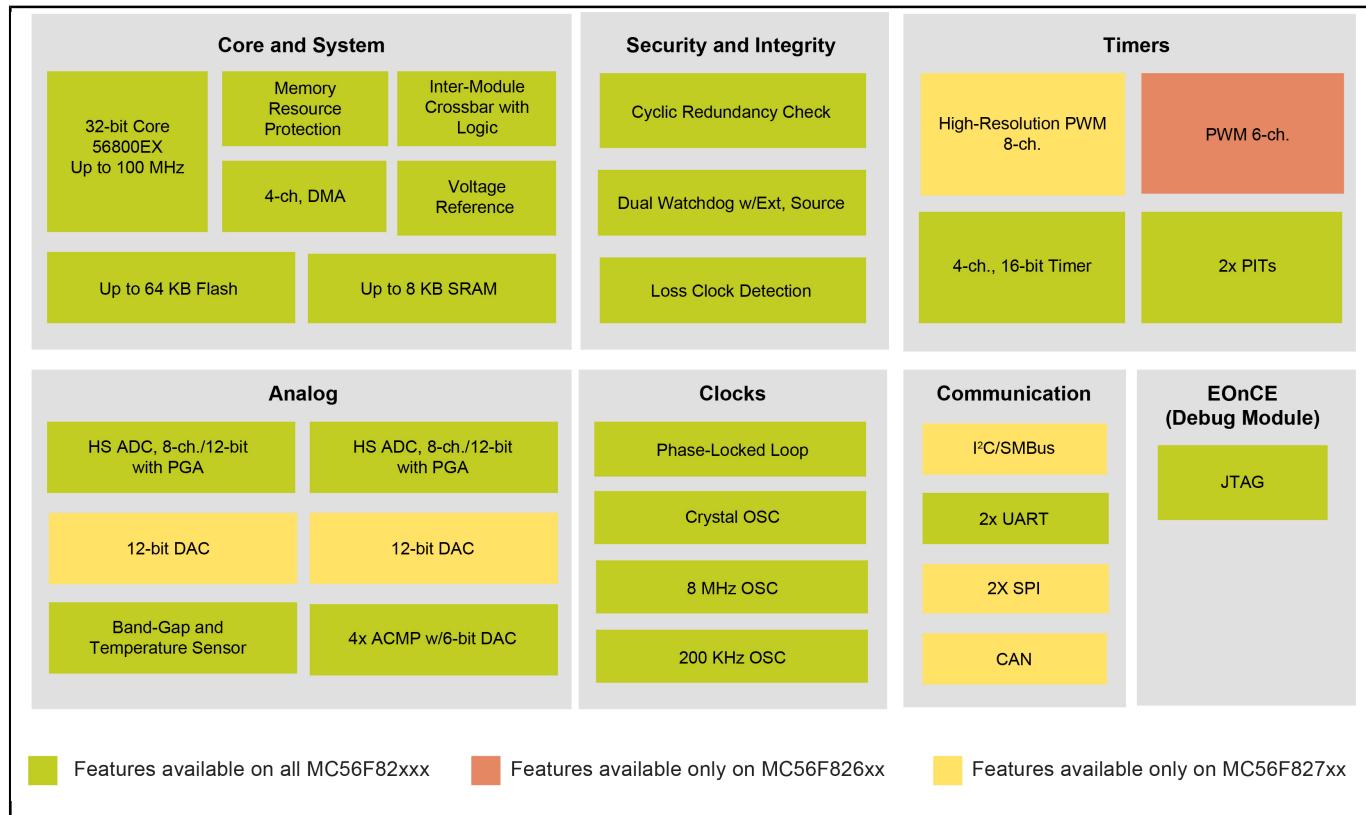
MC56F82xxx

Last Updated: Jan 8, 2026

The MC56F82xxx DSP MCU family offers outstanding power consumption at runtime with exceptional performance, precision, and control.

- Targets high-efficiency digital power conversion (MC56F827xx) and advanced motor control (MC56F826xx) applications
- Delivers half the power with twice the performance for energy-efficient applications
- Reduces costs through higher switching frequencies
- Increases system safety by restricting user code from accessing key memory locations and peripherals reserved for supervisor access
- Enables compact PCB design for space-constrained applications while still providing the precision and control needed

30517_MC56F827XX_BD Block Diagram



View additional information for [MC56F826xx and MC56F827xx Digital Signal Controllers](#).

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.