



FS25 System Basis Chip (SBC) for Automotive Zonal Architectures

FS25

Preproduction

This page contains information on a preproduction product. Specifications and information herein are subject to change without notice. For additional information please contact your sales representative.

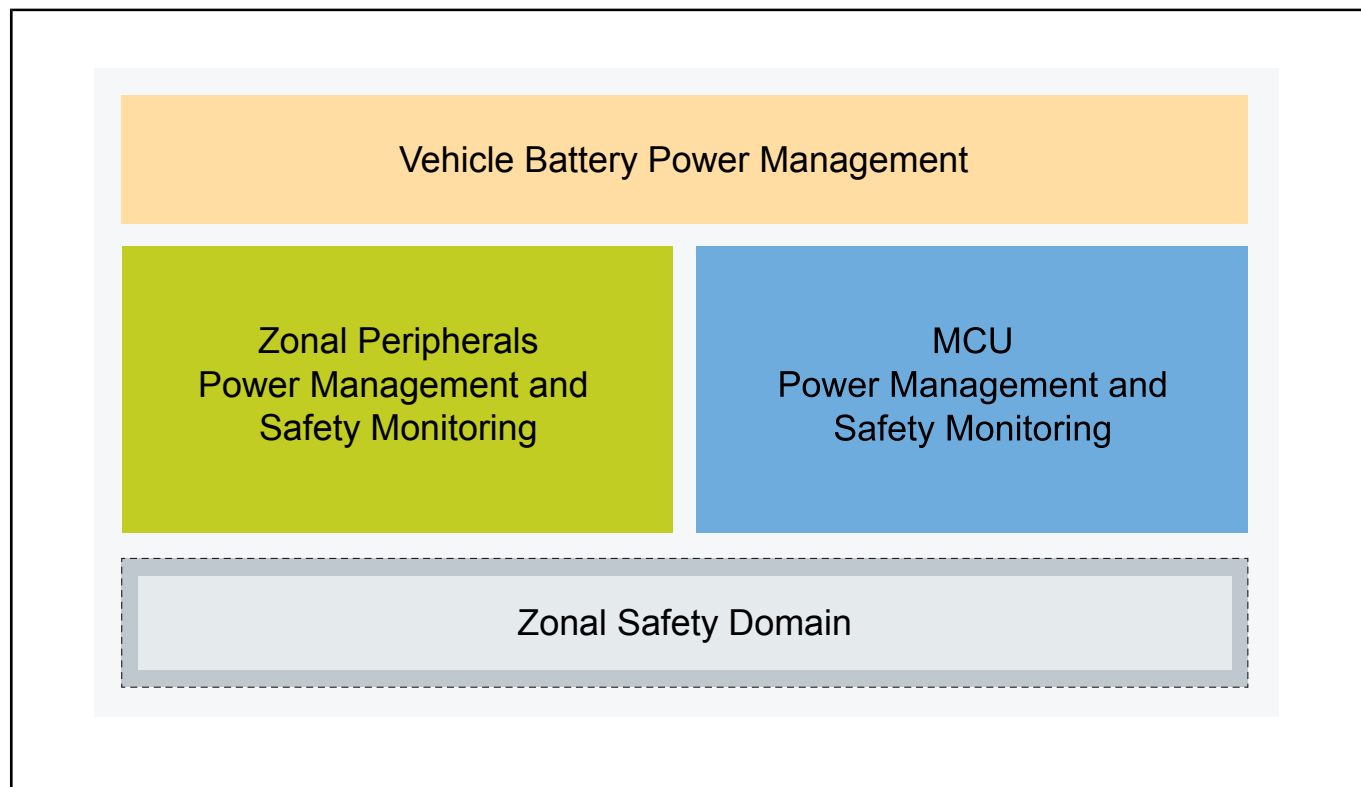
Last Updated: Dec 1, 2025

The FS25 system basis chip (SBC) is designed to support NXP's S32K5 and S32J devices by managing power distribution and system control. It addresses current energy management requirements and includes features for protection, fault handling and predictable operation.

Startup parameters are stored in one-time programmable (OTP) memory, reducing the need for external configuration components. The chip also includes an analog-to-digital converter (ADC) and general-purpose inputs/outputs (GPIOs) supporting wake-up sources like input/output (I/O) events, long-duration timers and inter-integrated circuit (I²C) communication.

Developed in line with the ISO 26262 compliance, the FS25 supports ASIL D safety levels through an independent safety monitoring unit (iSMU) with built-in self-test and fail-safe outputs to meet the highest automotive safety integrity levels.

SBC for Automotive Zonal Architectures Block Diagram



View additional information for [FS25 System Basis Chip \(SBC\) for Automotive Zonal Architectures](#).

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.