



S32M27x PMSM/BLDC Motor Control Evaluation Board

S32M27XEB

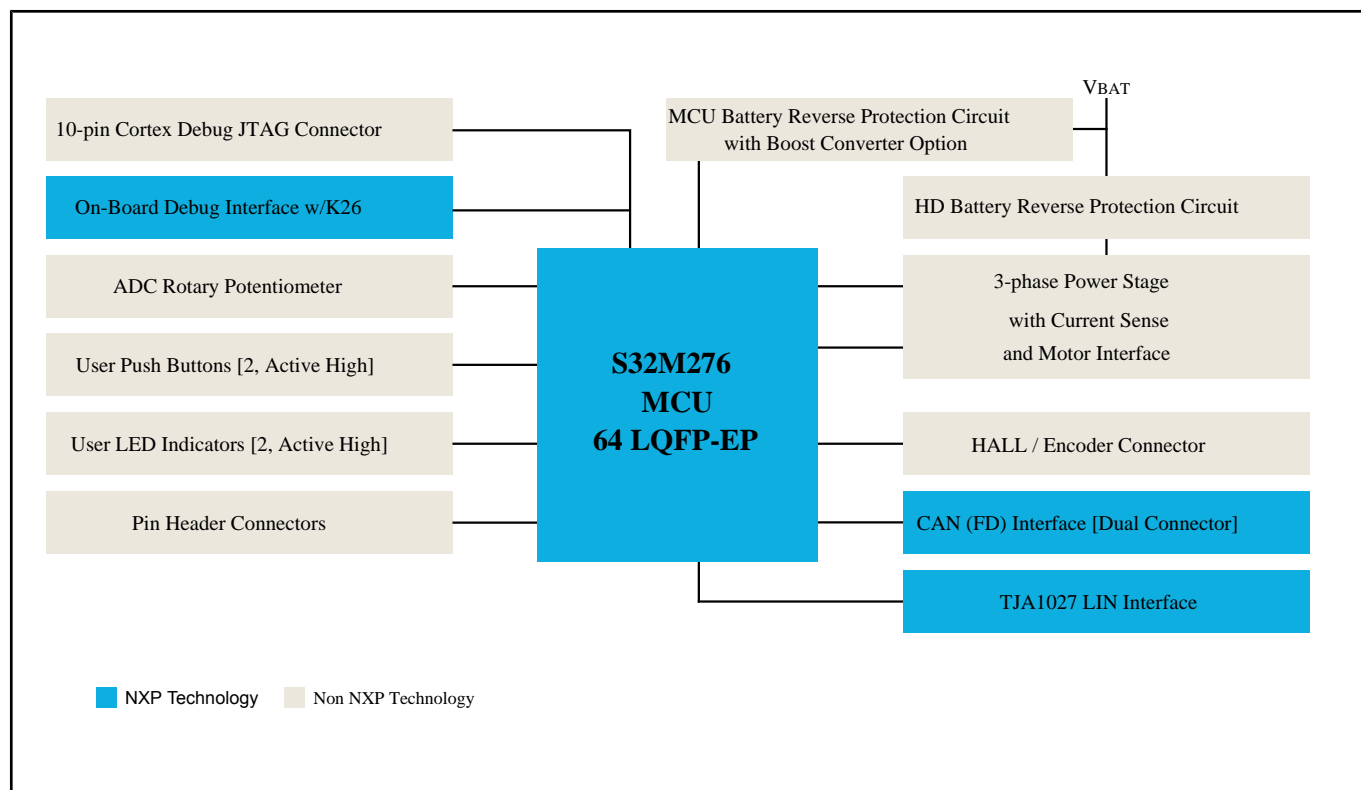
Last Updated: Dec 23, 2025

The S32M27xEB-C064 and S32M27xEB-L064 are an evaluation boards engineered for 3-Phase Brushless Direct Current (BLDC) and [Permanent Magnet Synchronous Motor \(PMSM\)](#) control applications like electric pumps, cooling systems and actuators like sunroof or seat position adjustment.

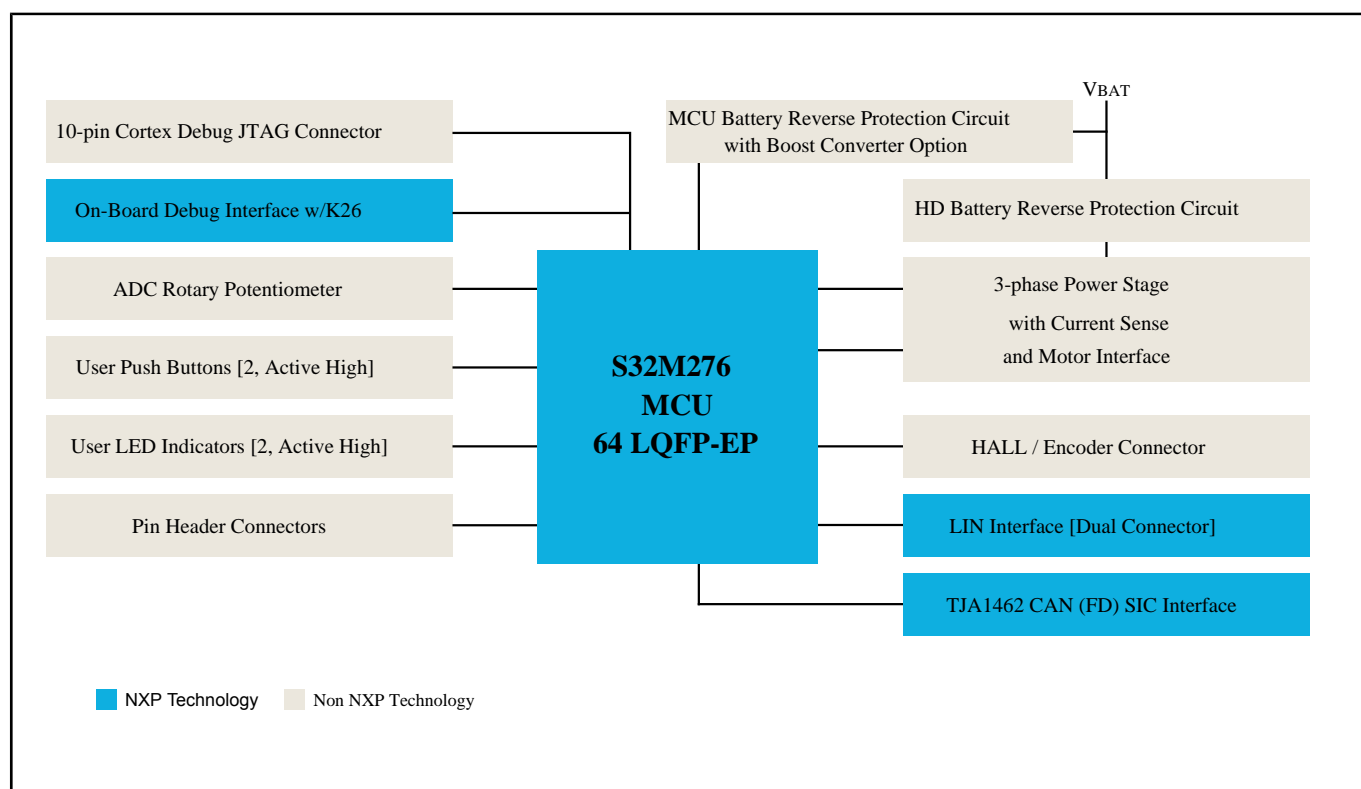
The S32M27x is an integrated solution based on an internal 32-bit Arm® Cortex®-M7 S32K3 microcontroller and analog die with voltage regulator, gate driver, current sensing and LIN/CAN physical layer. Evaluation board enables rapid prototyping and evaluation of BLDC and PMSM control applications without having to wait for the final hardware design.

The S32M27XEB application software leverages the [Automotive Math and Motor Control Library \(AMMCLib\)](#) set plus [Real-Time Drivers \(RTD\)](#) software package to provide a complete reference implementation for both 3-phase BLDC and PMSM motor control.

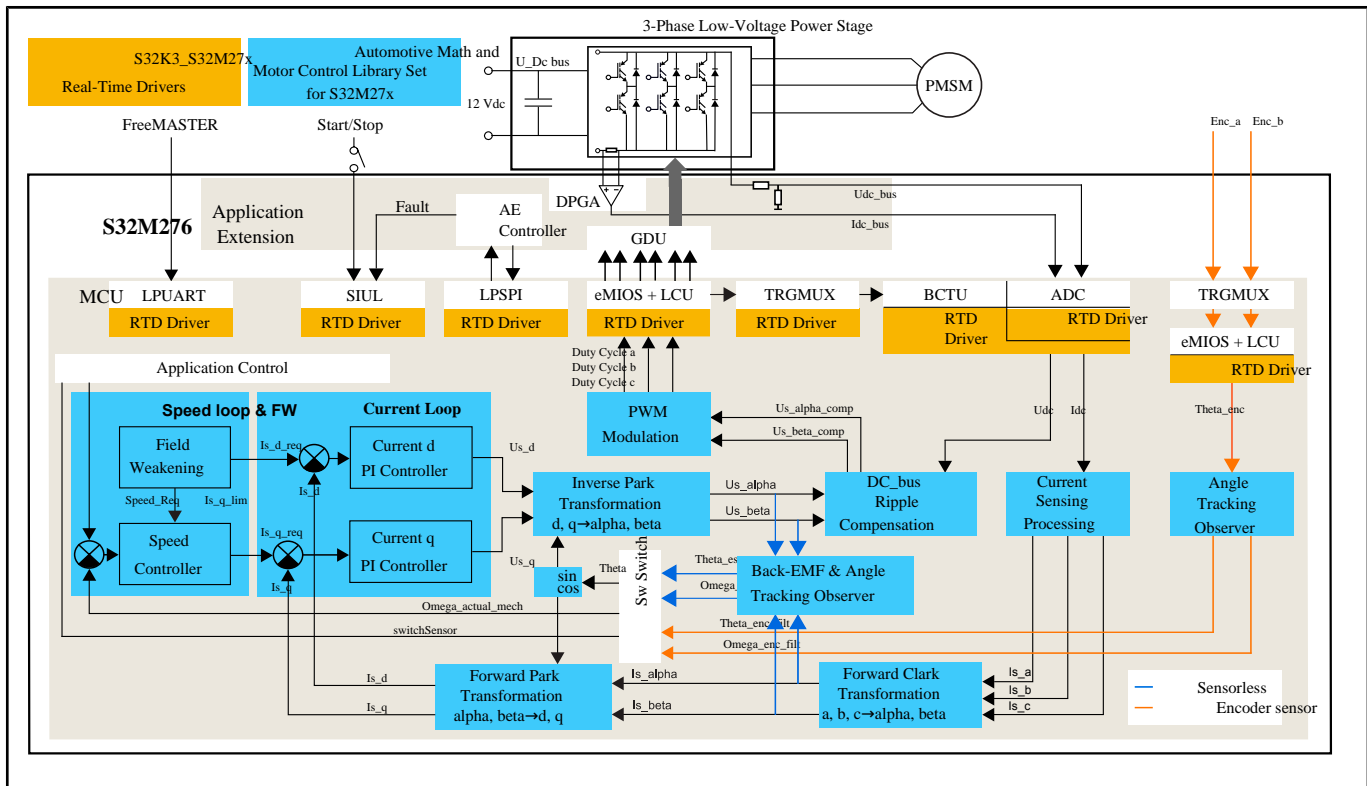
S32M27XEBV with CAN Interface Block Diagram



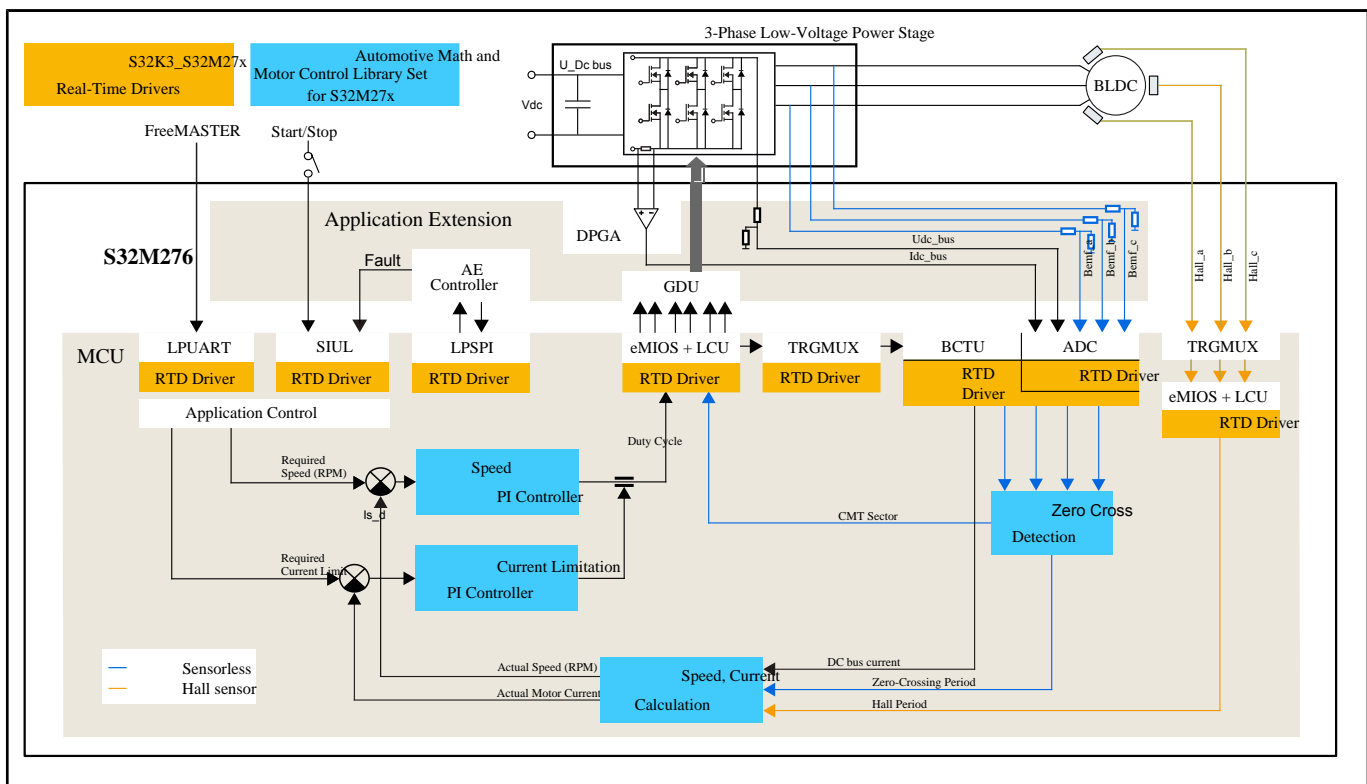
S32M27XEBV with LIN Interface Block Diagram



S32M276 PMSM FOC Application Block Diagram



S32M276 BLDC 6-Step Application Block Diagram



View additional information for [S32M27x PMSM/BLDC Motor Control Evaluation Board](#).

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.