



FRDM Automotive S32M276 PMSM/BLDC Motor Control Development Board

FRDM-A-S32M276

Active

Last Updated: Mar 10, 2026

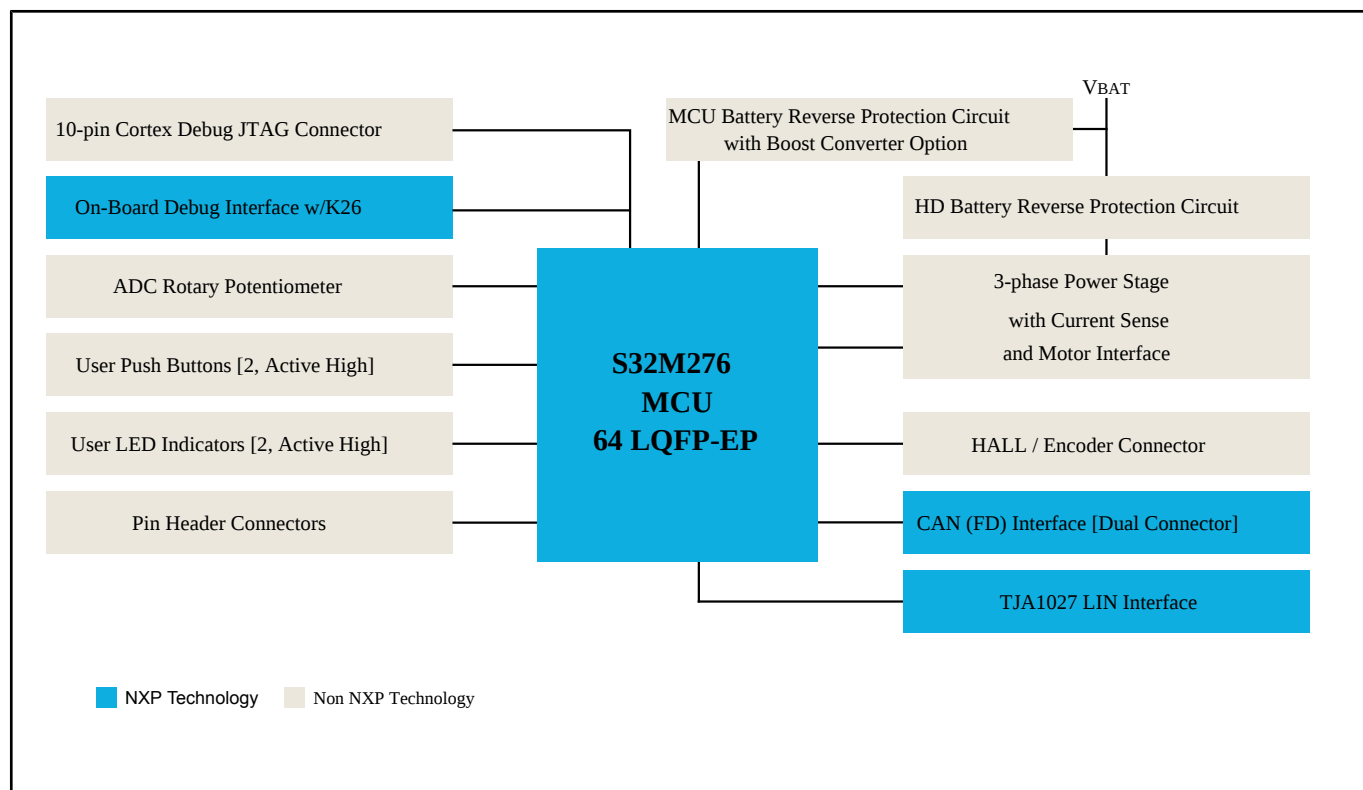
S32M27XEVb Renamed to FRDM-A-S32M276: Now part of the FRDM Automotive Ecosystem under its new name, the board keeps the same hardware and adds full ecosystem compatibility for flexible, scalable development.

The FRDM-A-S32M276-C064 and FRDM-A-S32M276-L064 are development 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.

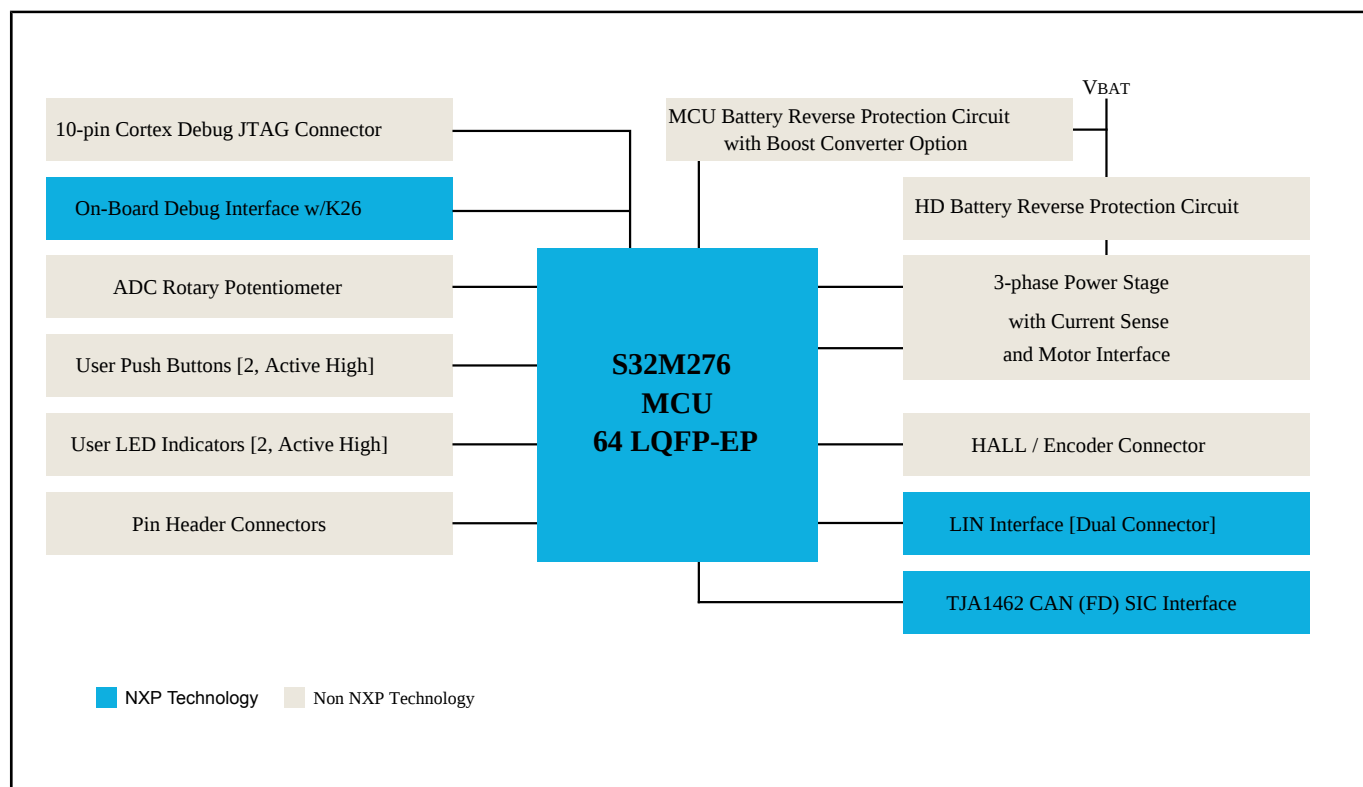
The FRDM-A-S32M276 is an integrated solution based on an internal 32-bit Arm® Cortex®-M7 S32K3 microcontroller and analog die with voltage regulator, gate driver, current sensing and LIN/CAN physical layer. Development board enables rapid prototyping and evaluation of BLDC and PMSM control applications without having to wait for the final hardware design.

The FRDM-A-S32M276 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.

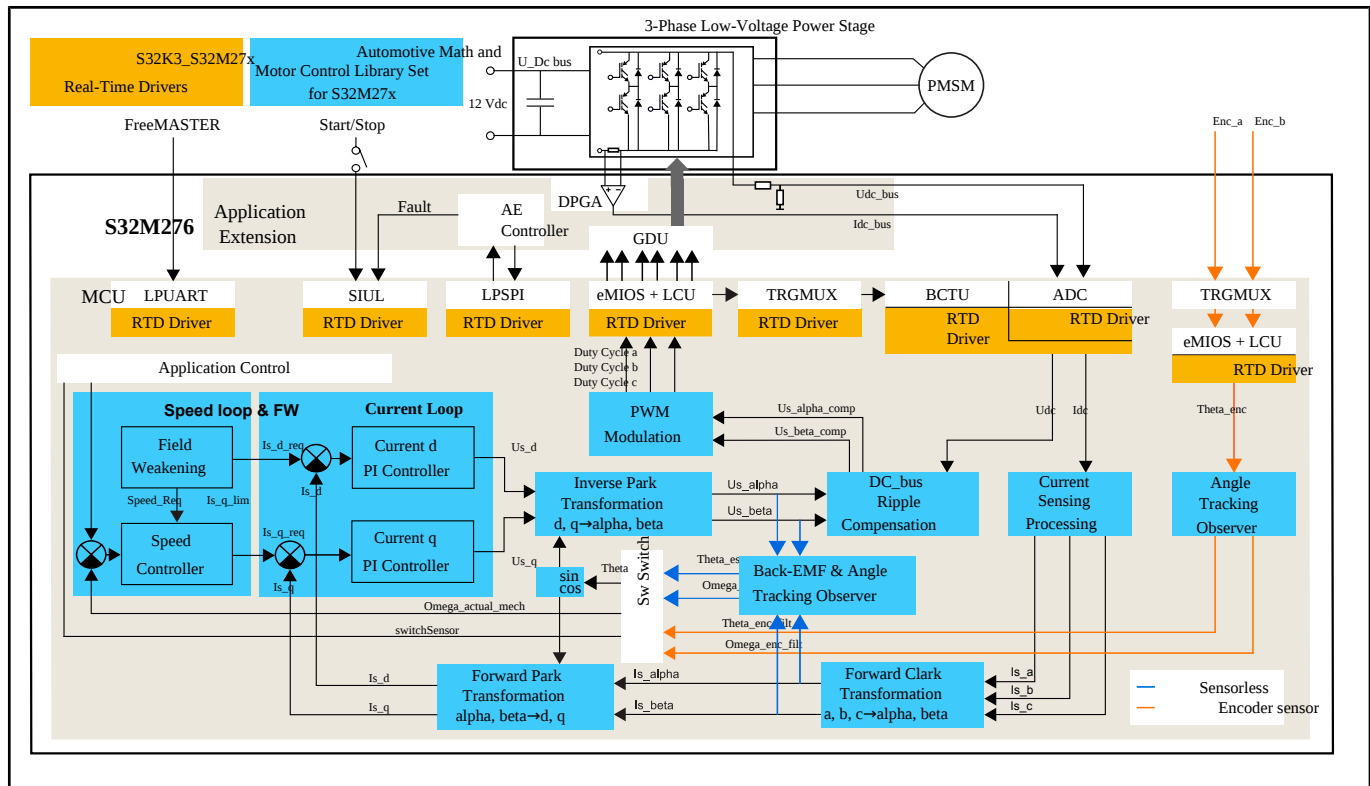
FRDM-A-S32M276 with CAN Interface Block Diagram



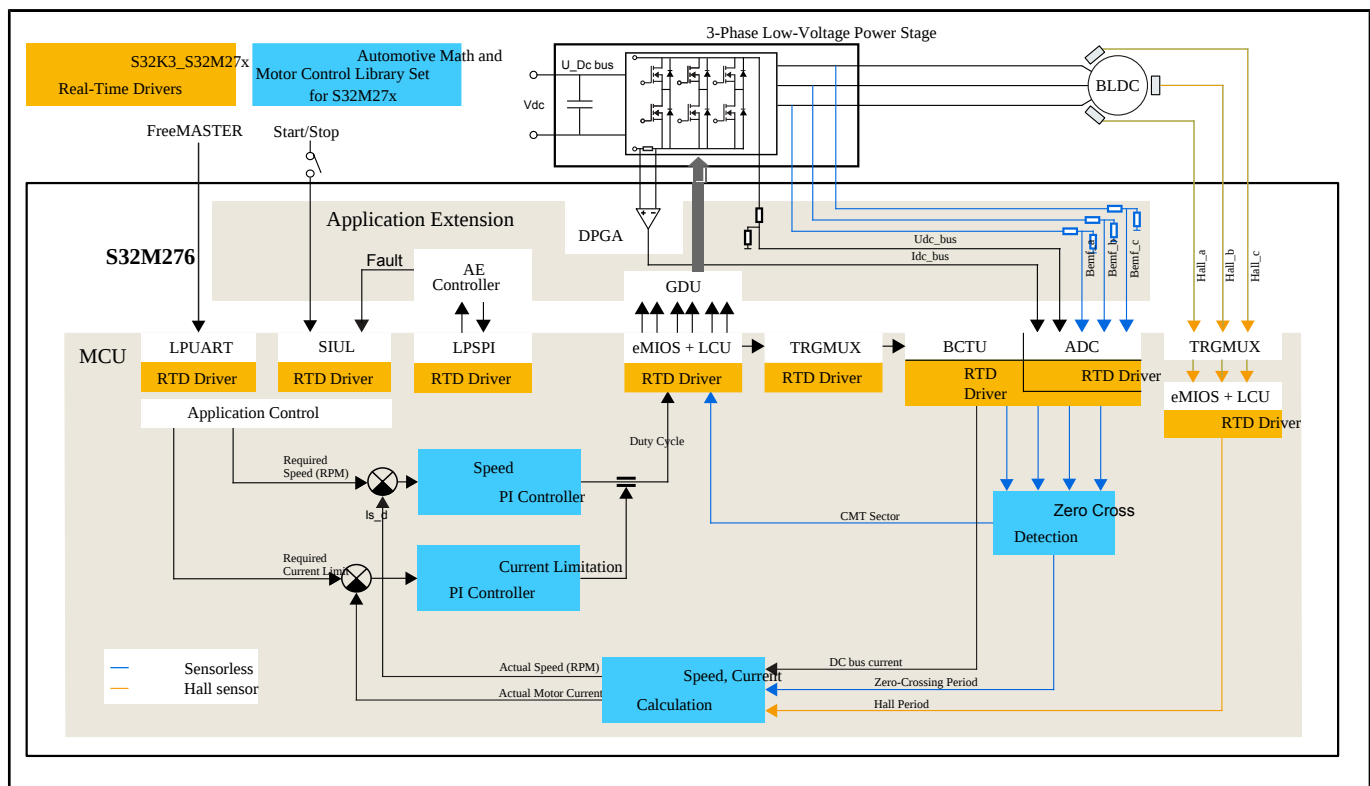
FRDM-A-S32M276 with LIN Interface Block Diagram



FRDM-A-S32M276 PMSM FOC Application Block Diagram



FRDM-A-S32M276 BLDC 6-Step Application Block Diagram



View additional information for [FRDM Automotive S32M276 PMSM/BLDC Motor Control Development 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.