FRDM Automotive S32M276 PMSM/ BLDC Motor Control Development Board

FRDM-A-S32M276

Active

Last Updated: Mar 10, 2026

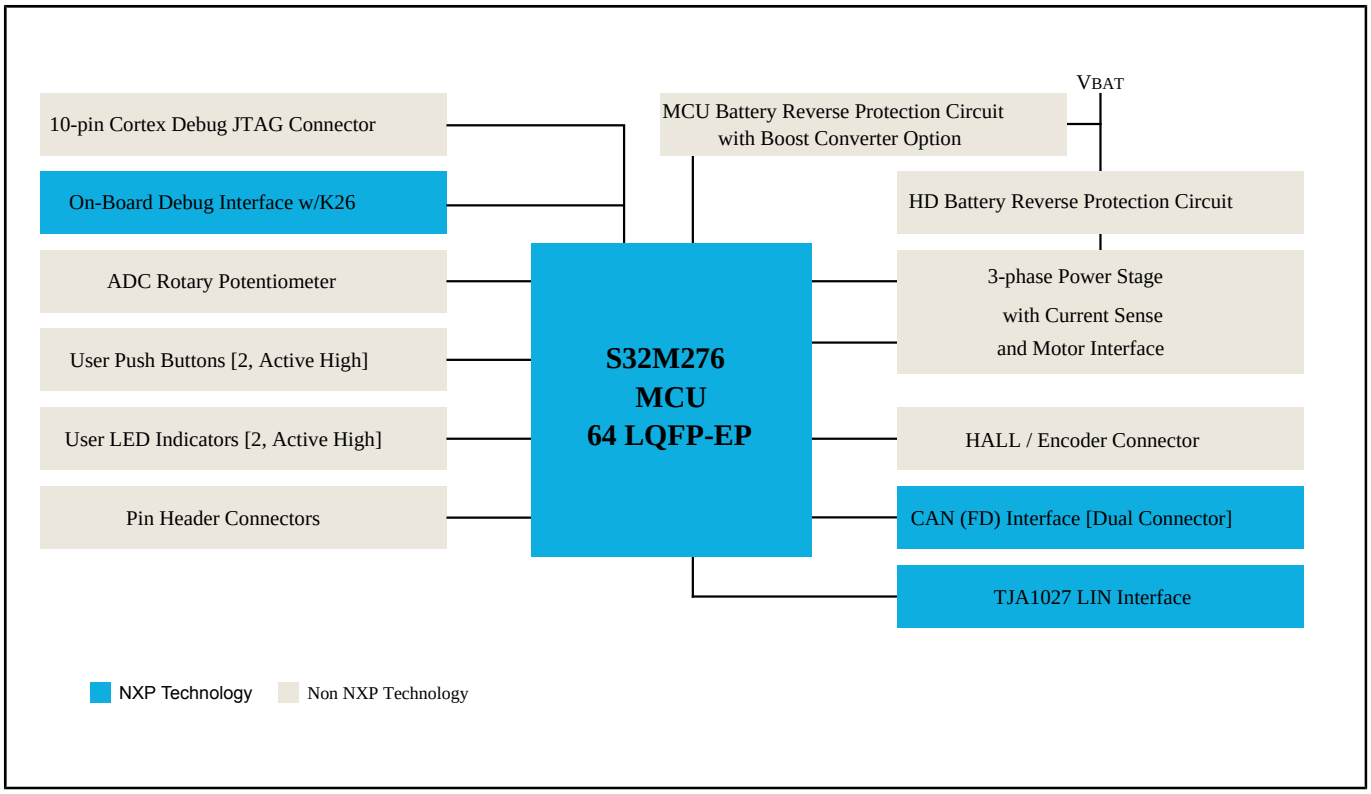
S32M27XEVB Renamed to FRDM-A-S32M276: Now part of the FRDM Automotive Ecosystem under its new name, the board keeps the same hardware and adds full ecosystem compatibility for flexible, scalable development.

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.

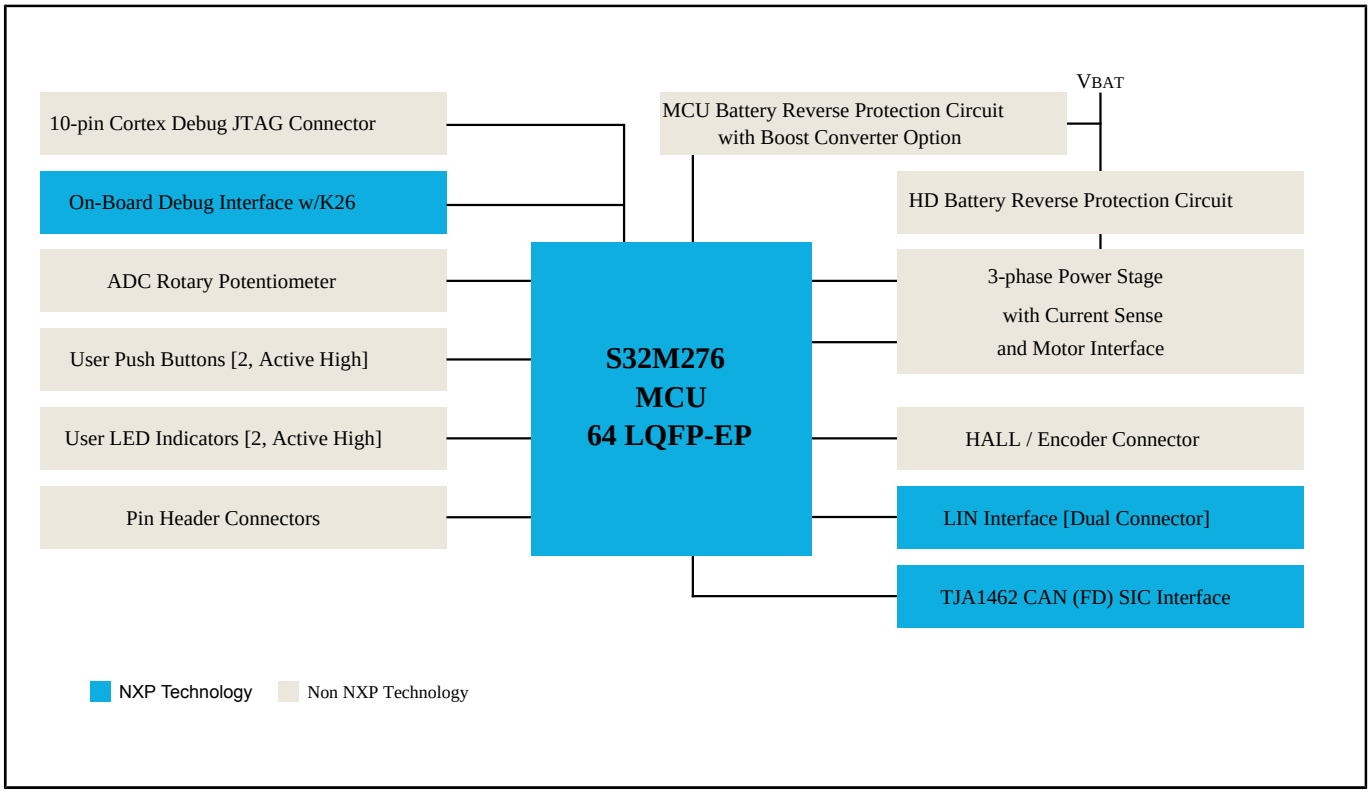
The FRDM-A-S32M276 is an integrated solution based on an internal 32-bit Arm® Cortex®-M7 S32K3 microcontroller and analog die with voltage regulator, gate driver, current sensing and LIN/CAN physical layer. Development board enables rapid prototyping and evaluation of BLDC and PMSM control applications 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.

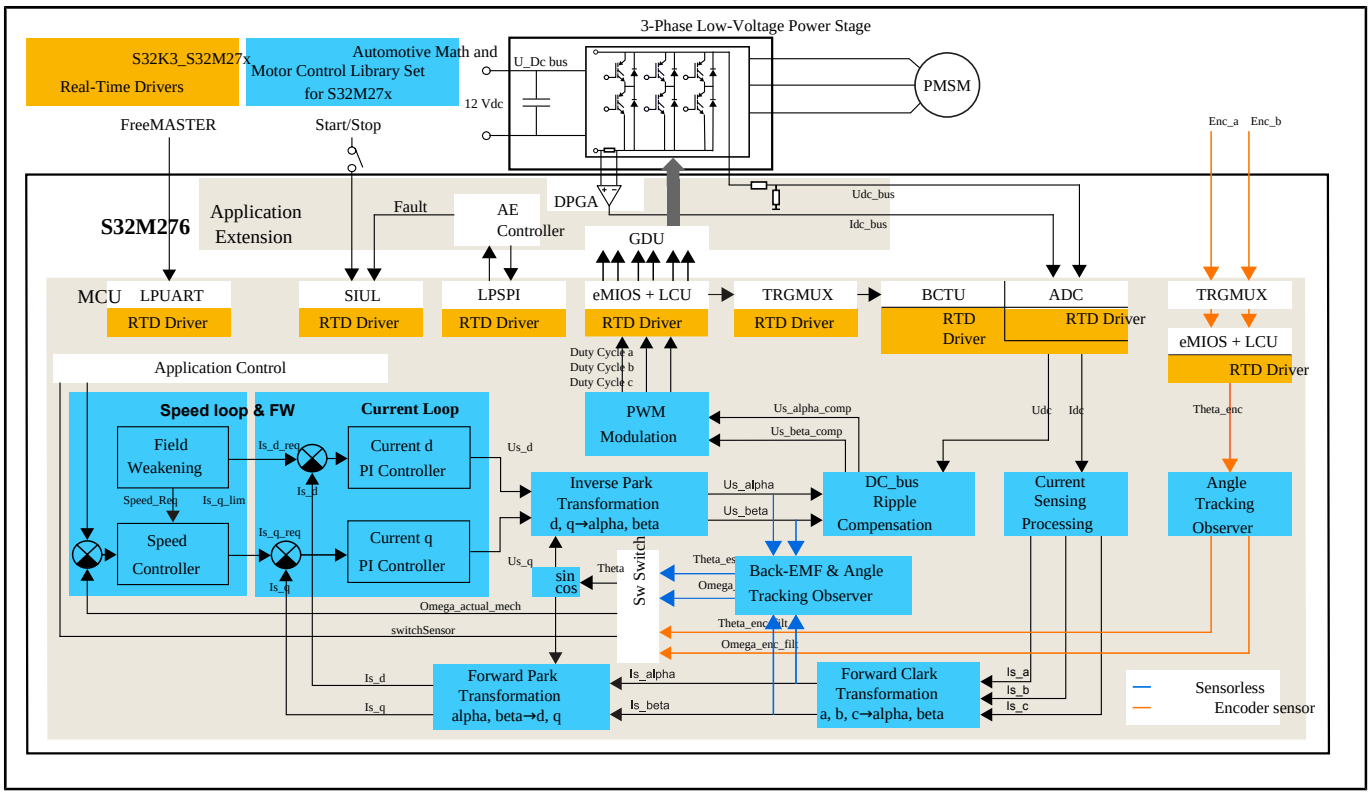
FRDM-A-S32M276 with CAN Interface Block Diagram



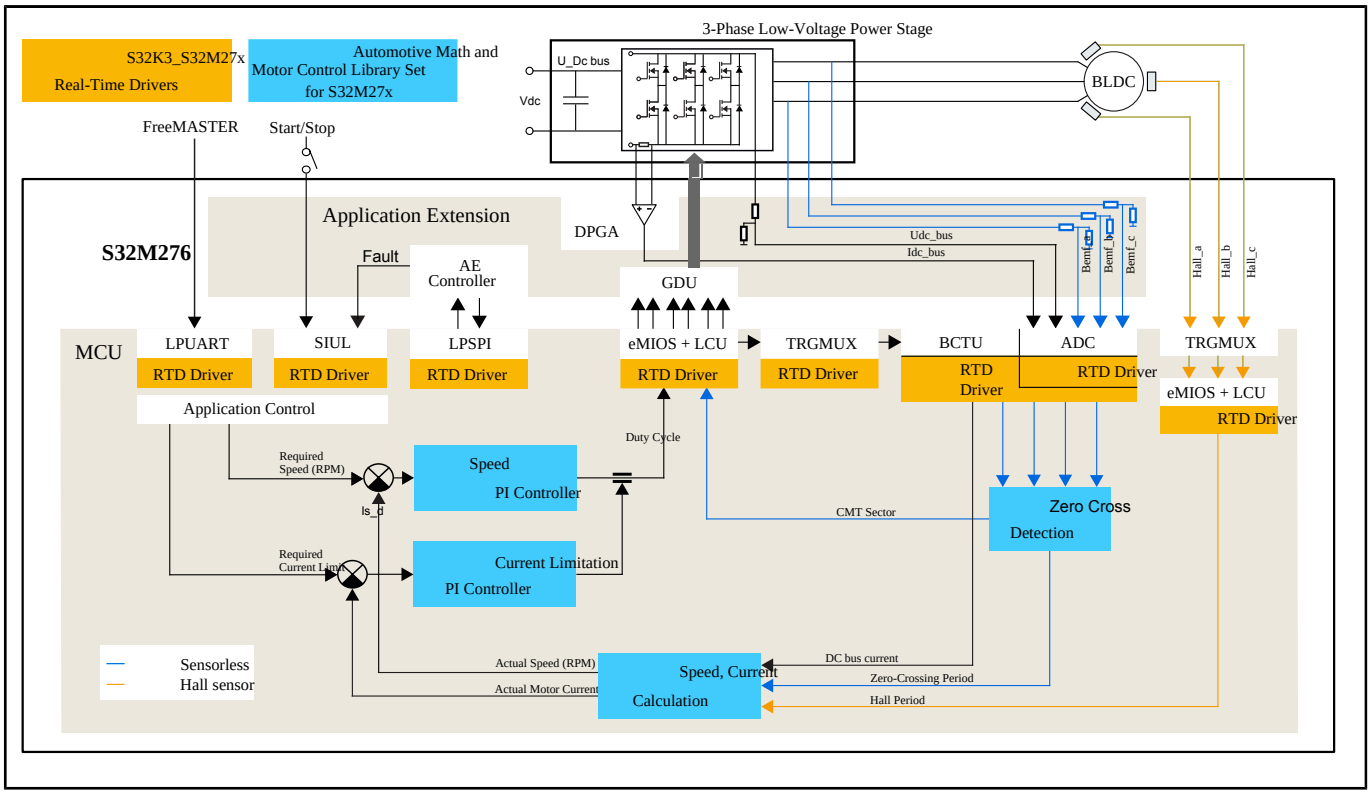
FRDM-A-S32M276 with LIN Interface Block Diagram



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.