

S32M27x PMSM/BLDC Motor Control Evaluation Board

S32M27XEVB N

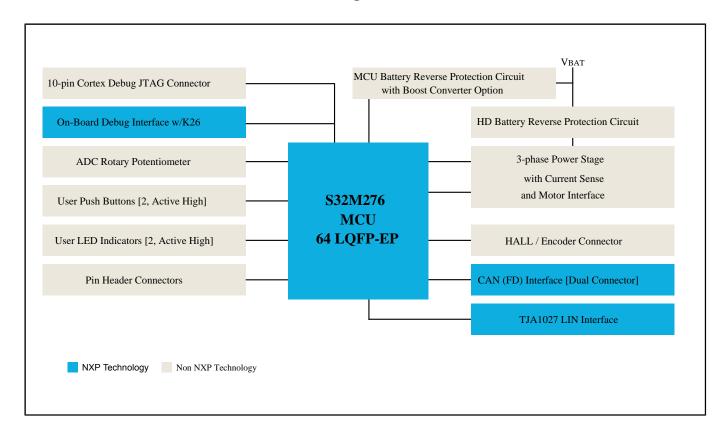
Last Updated: Oct 31, 2024

The S32M27xEVB-C064 and S32M27xEVB-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.

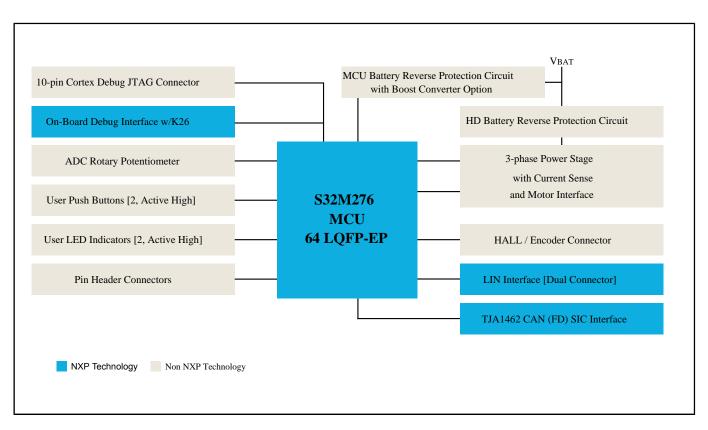
The S32M27x is an integrated solution based on an internal 32-bit Arm® Cortex®-M7 S32K3 microcontroller and analog die with voltage regulator, gate driver, current sensing and LIN/CAN physical layer. Evaluation board enables rapid prototyping and evaluation of BLDC and PMSM control applications without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

The S32M27XEVB 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.

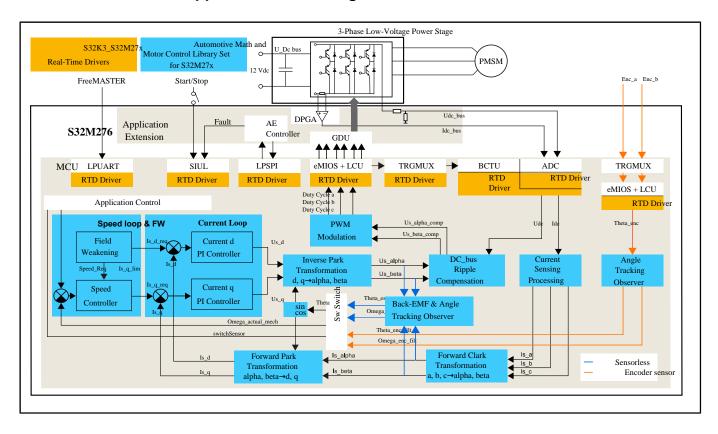
S32M27XEVB with CAN Interface Block Diagram



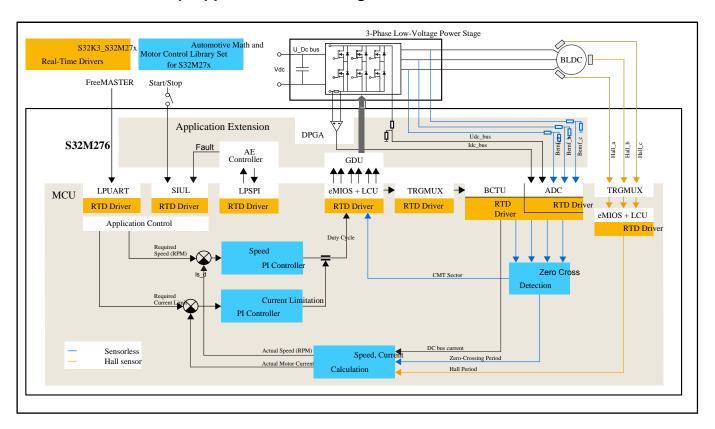
S32M27XEVB with LIN Interface Block Diagram



S32M276 PMSM FOC Application Block Diagram



S32M276 BLDC 6-Step Application Block Diagram



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