

# S32M24x PMSM/BLDC Motor Control Evaluation Board

S32M24XEVB N

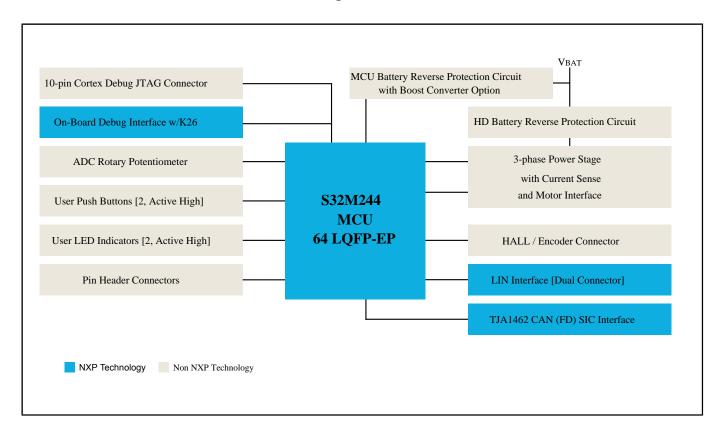
Last Updated: Oct 31, 2024

The S32M24xEVB-C064 and S32M24xEVB-L064 are 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, used in sunroof control or seat position adjustment.

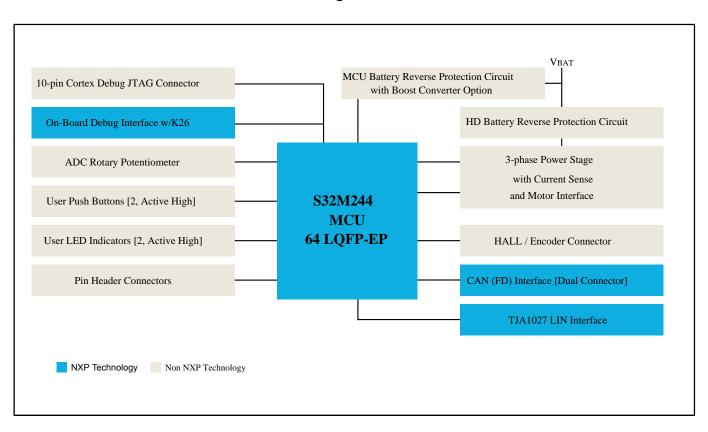
Based on the S32M24x integrated solution that offers a 32-bit Arm® Cortex®-M4 S32K1 microcontroller and an analog die with voltage regulator, gate driver, current sensing and LIN/ CAN physical layer in a system-in-package (SiP) design, this evaluation board enables rapid prototyping and evaluation of BLDC and PMSM control applications without having to wait for the final hardware design.

The S32M24xEVB-C064 and S32M24xEVB-L064 leverage the MCSPTE1AK344 application software with 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.

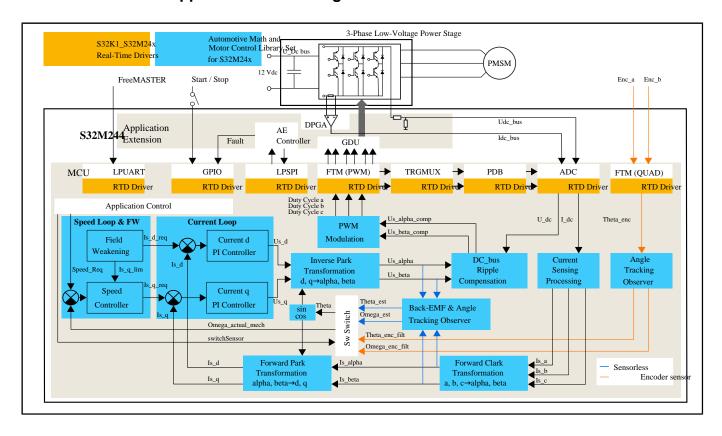
### S32M24 EVB with LIN Interface Block Diagram



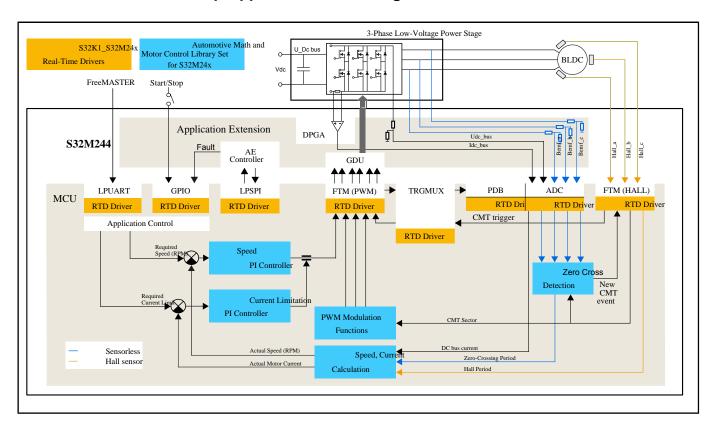
# S32M24 EVB with CAN Interface Block Diagram



## S32M24XEVB FOC Application Block Diagram



### S32M24XEVB BLDC 6-Step Application Block Diagram



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