



# S32K344 Brushless Direct Current and Permanent Magnet Synchronous Motor Control Development Kit

## MCSPTE1AK344

Last Updated: Mar 12, 2024

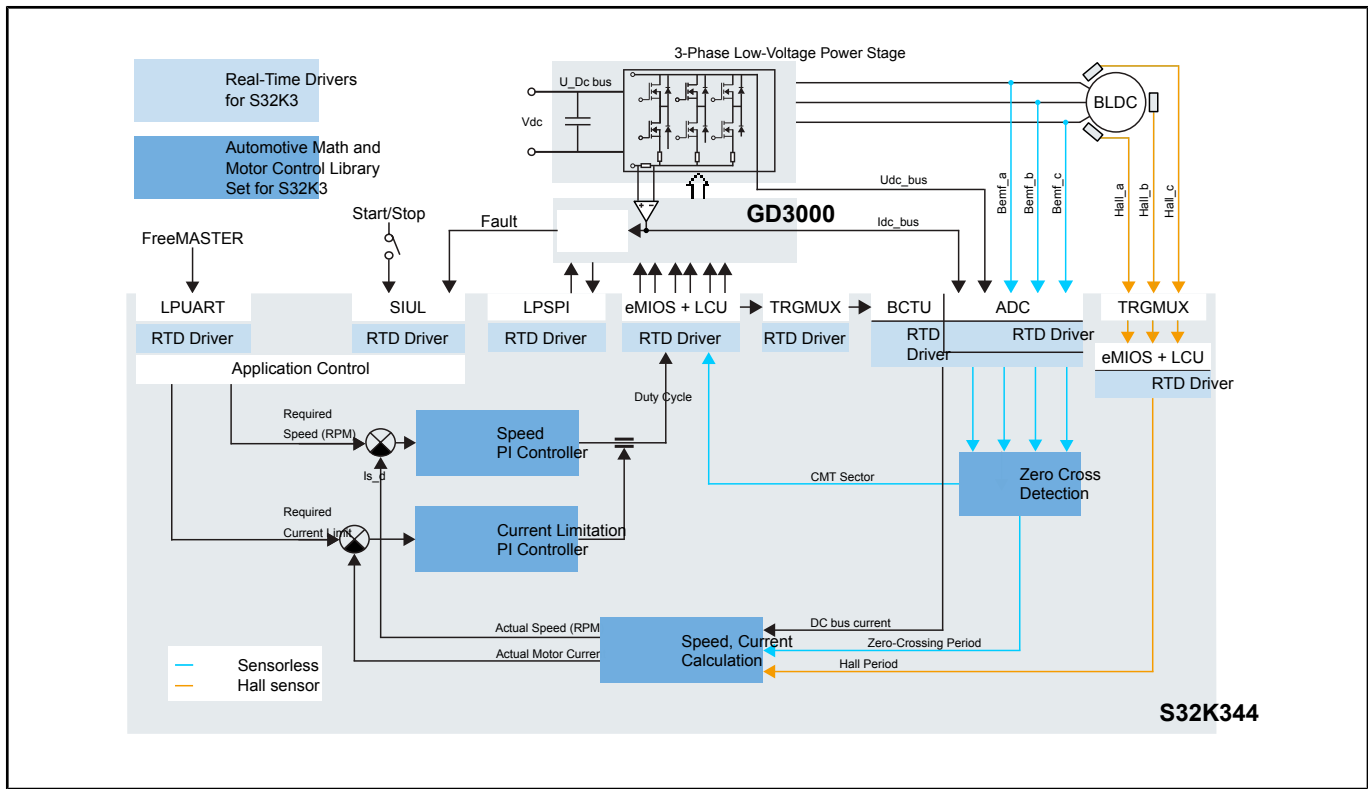
The MCSPTE1AK344 is a development kit engineered for brushless direct current (BLDC) motor control, targeting heating, ventilation and air conditioning (HVAC) or electric pumps, and 3-phase permanent magnet synchronous motor (PMSM) control, targeting active suspension, electric powertrain, eTurbo or belt start generator.

Based on the 32-bit Arm® Cortex®-M7 S32K3 microcontroller and the GD3000 pre-driver, the MCSPTE1AK344 enables rapid prototyping and evaluation of BLDC and PMSM control applications without having to wait for the final hardware design.

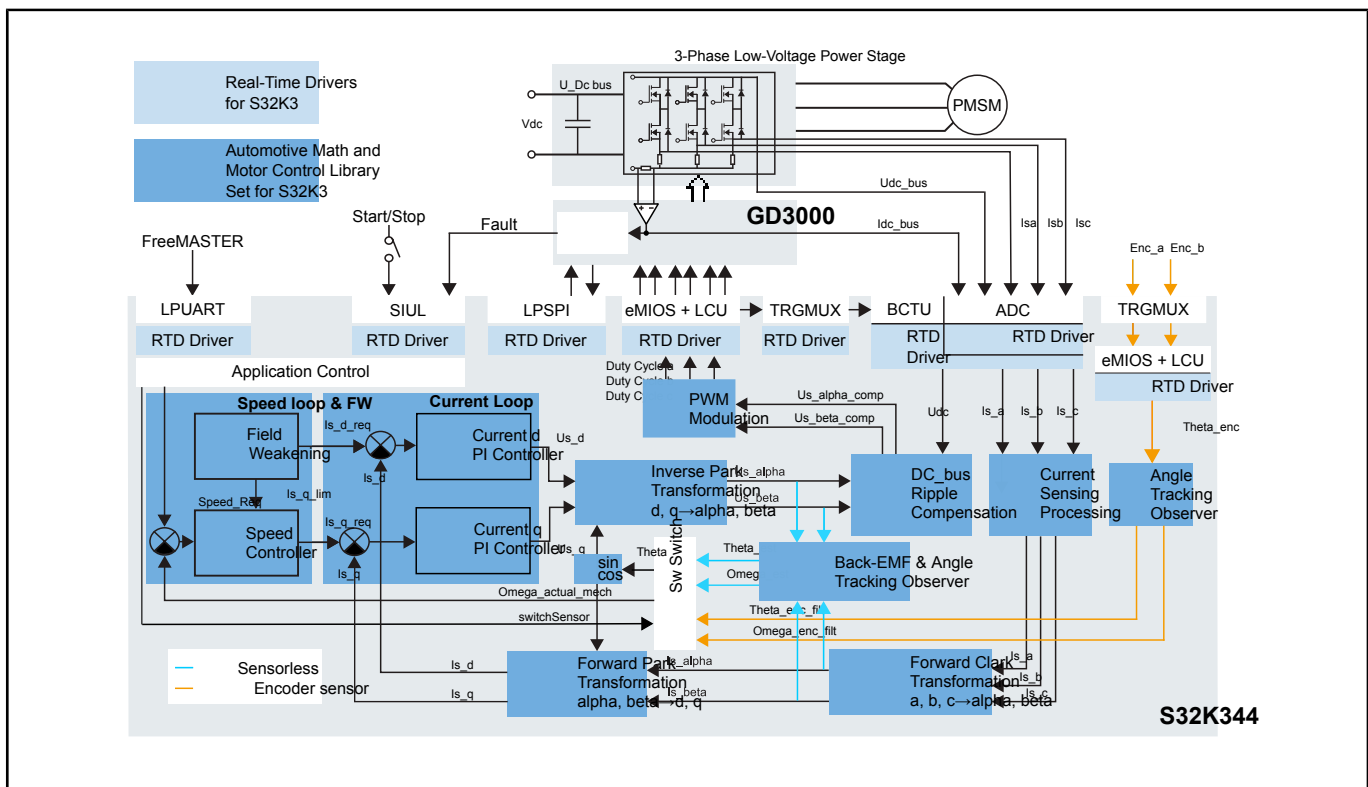
The MCSPTE1AK344 application software leverages the Automotive Math and Motor Control Library (AMMCLib) set plus real-time drivers (RTD) software package to provide a complete reference implementation for both 3-phase BLDC and PMSM motor control.

The RTD software allows building motor control applications for both AUTOSAR® and non-AUTOSAR environments.

## MCSPT1AK344 BLDC Development Kit Block Diagram



## MCSPT1AK344 PMSM Development Kit Block Diagram



View additional information for [S32K344 Brushless Direct Current and Permanent Magnet Synchronous Motor Control Development Kit](#).

**Note:** The information on this document is subject to change without notice.

---

**[www.nxp.com](http://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. © 2024 NXP B.V.