

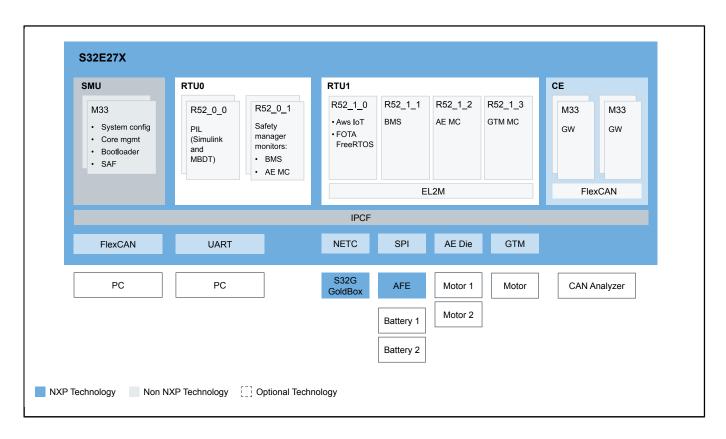
S32E2 Propulsion Domain Controller (PDC)

S32E2PDC

Last Updated: Jun 9, 2025

The NXP S32E2 Propulsion Domain Controller proof of concept (POC) platform is an integrated solution in one ECU. This solution demonstrates the integration abilities of S32E2 by simultaneously holding system manager, processor-in-the-loop (PIL), safety manager, AWS lot, battery management system (BMS), PMSM motor control with Application Extension (AE) Die, PMSM motor control with GTM module, CAN gateway, bootloader, firmware over-the-air (FOTA) and EL2 Monitor applications. Owing to powerful Arm® Cortex®-R52 cores, abundant flexible peripherals and well-designed isolation/virtualization, various applications can function well without interferences. This solution offers customers technical details in the multicore system, peripheral usage and useful libraries. The user guide elaborates on building all applications from scratch.

S32E2 Propulsion Domain Controller Block Diagram



View additional information for S32E2 Propulsion Domain Controller (PDC).

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. © 2025 NXP B.V.