



S32R45 High-Performance Processor for Imaging Radar

S32R45

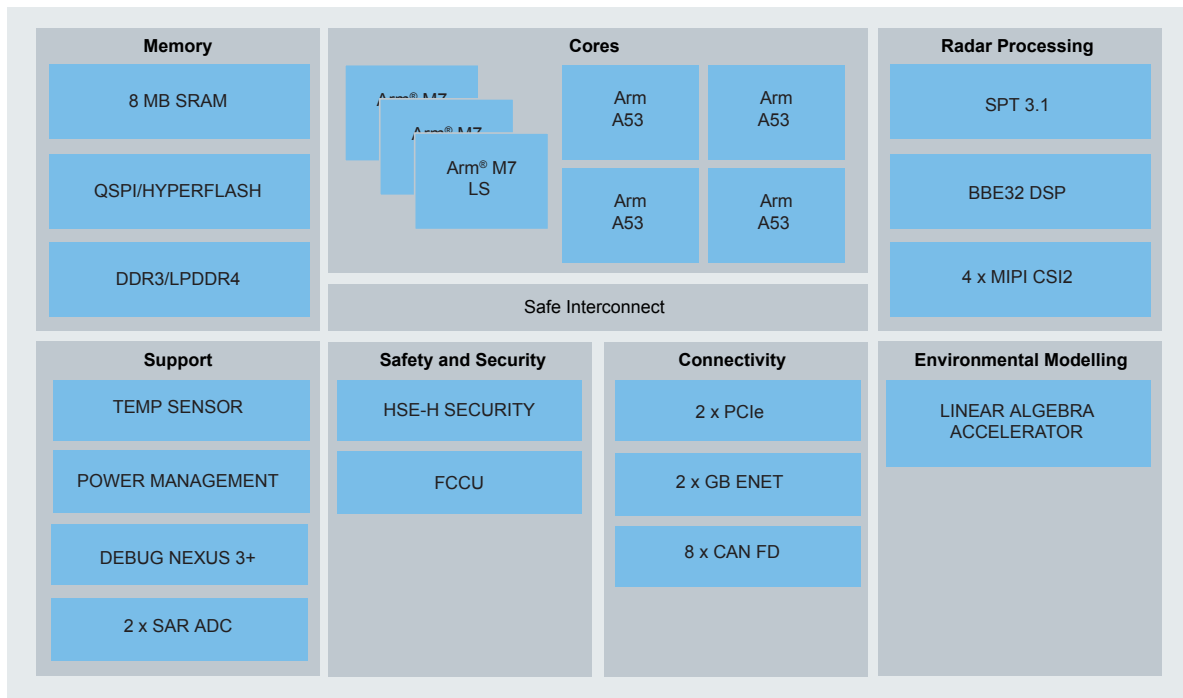
Last Updated: Apr 8, 2025

To build a complete radar system, please check out the fully integrated 77 Ghz RFCMOS companion Transceiver [TEF82xx](#).

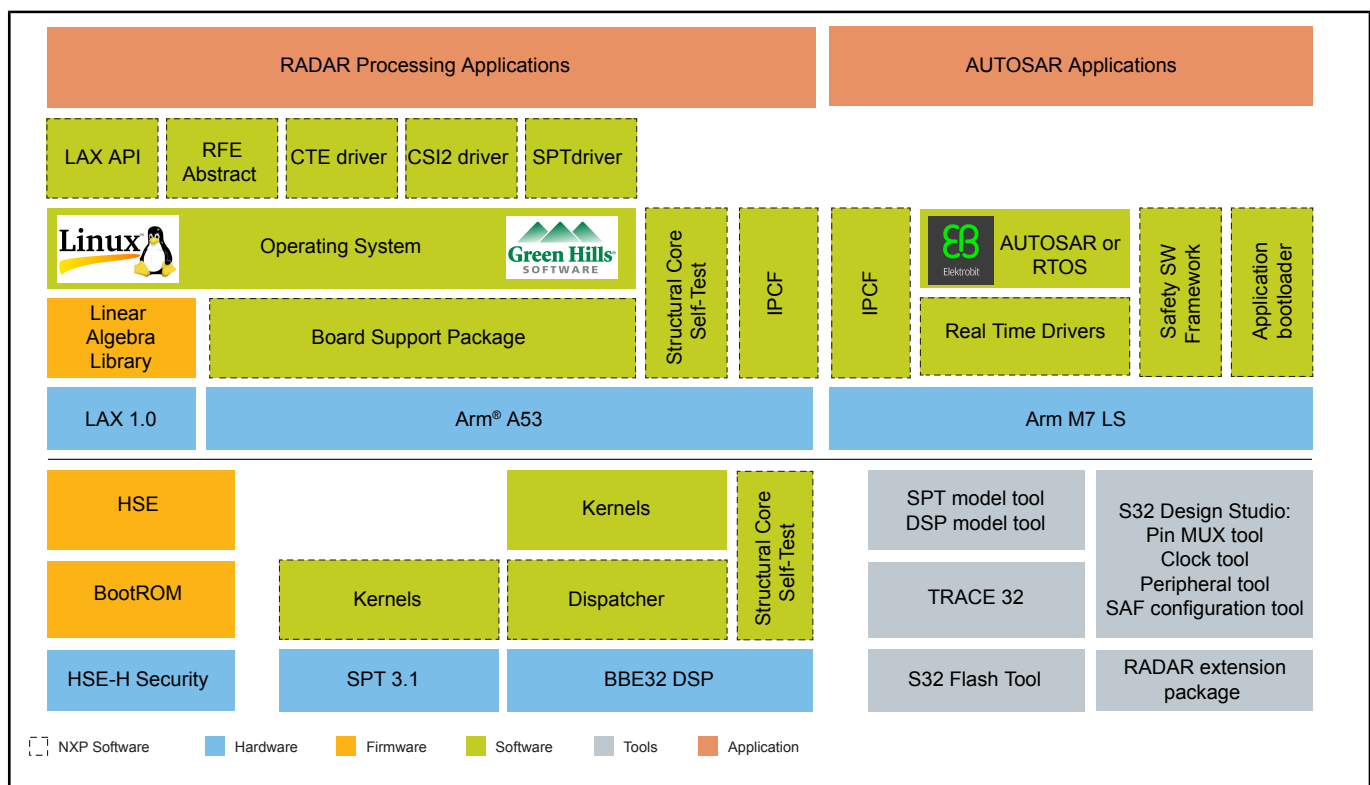
S32R45 is a 32-bit automotive radar microprocessor unit (MPU) based on Arm® Cortex® - A53 and Arm® Cortex® - M7 cores. Focused on advanced high resolution long-range front or rear radar sensors, providing imaging radar resolution capabilities. The high performance radar processing and power efficiency enable the latest ADAS radar applications with a dedicated processor suitable for volume adoption, while also covering industrial and consumer applications where dedicated high performance radar processing is required.

Designed to satisfy the latest security requirements through its HSE security engine, and meeting ASIL ISO26262 ASIL B(D) requirements, the S32R45 is the complete device for high performance radar processing.

S32R45 Radar MPU Block Diagram



S32R45 Software Ecosystem Block Diagram



View additional information for [S32R45 High-Performance Processor for Imaging Radar](#).

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.