



S32R41 High-Performance Processor for High-Resolution Radar

S32R41

Last Updated: Feb 19, 2026

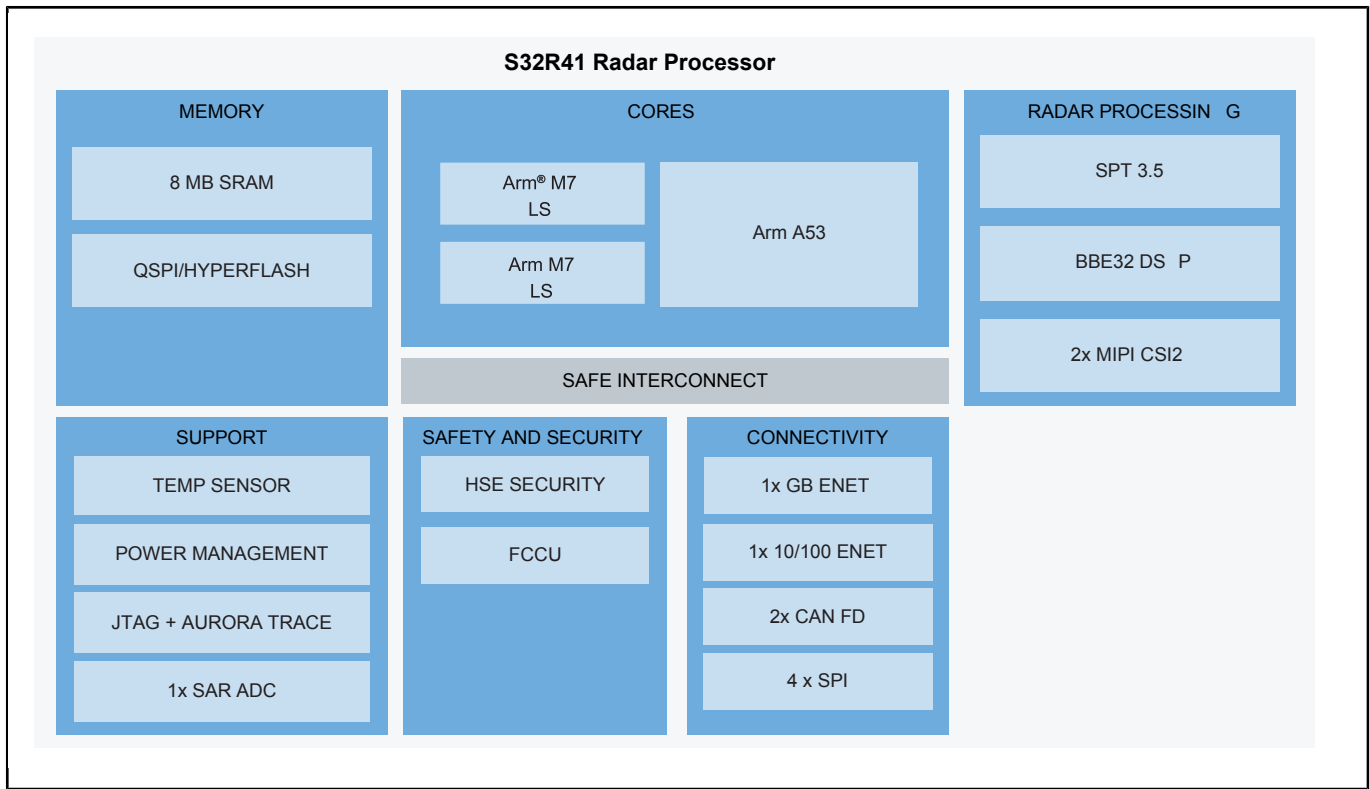
To build a complete radar system, please check out the fully integrated 77 Ghz RFCMOS companion Transceiver [TEF82xx](#).

S32R41 is a radar microprocessor unit (MPU) dedicated to advanced 77GHz radar applications. The architecture features Arm® Cortex®-A53 and Cortex-M7 cores which are combined with dedicated radar processing accelerators to create an optimal radar processing chain. It is designed to target automotive, industrial and consumer radar applications.

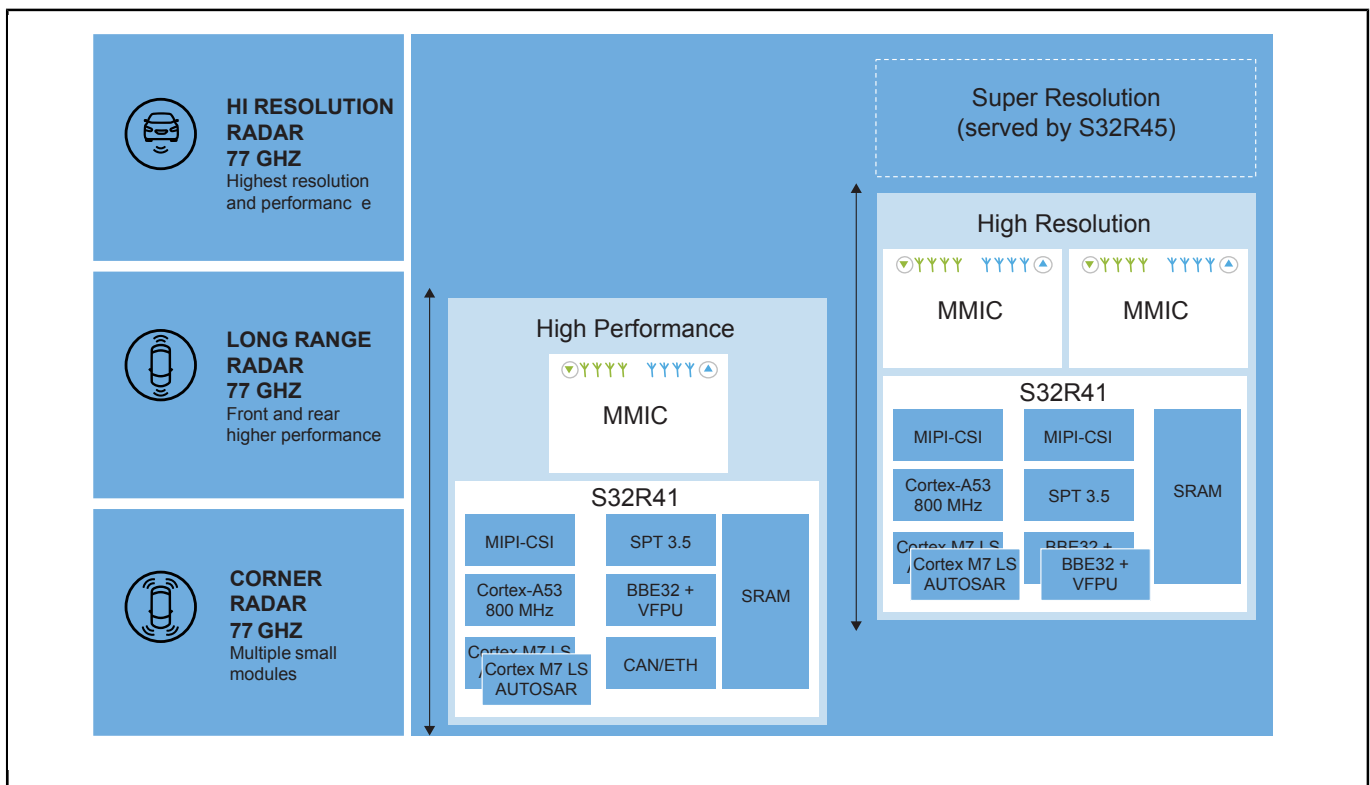
The comprehensive feature set enables the S32R41 family to meet the requirements of advanced high resolution corner and front radar applications. The high performance processing in combination with Dual MIPI CSI interfaces and 8MB of local SRAM enable high resolution radar systems that are required for L2 Autonomous driving applications and beyond.

The S32R41's architecture is part of [NXP's scalable radar portfolio](#). This enables scalable software reuse and reduced development complexity.

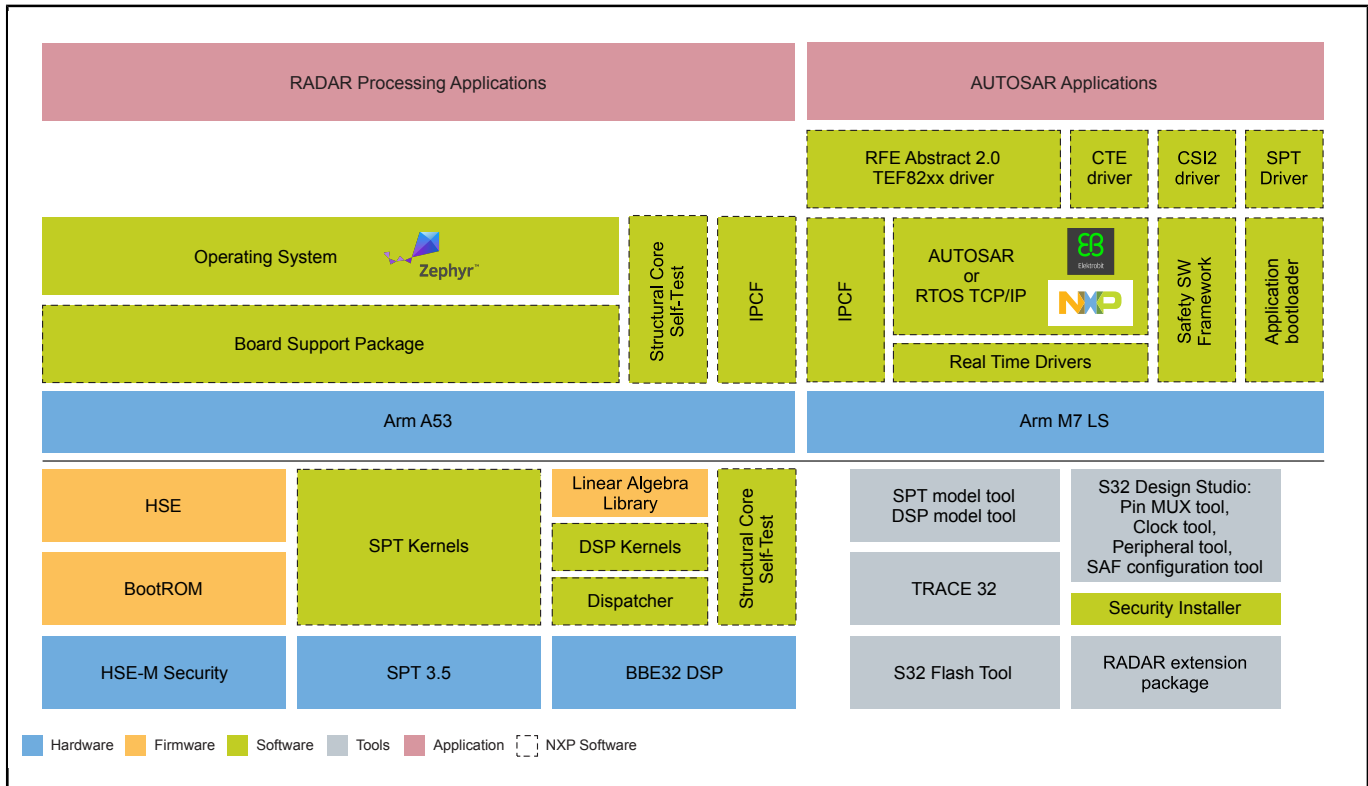
S32R41 Radar MPU Block Diagram



S32R41 Radar MPU App Block Diagram



S32R41 Software Ecosystem Block Diagram



View additional information for [S32R41 High-Performance Processor for High-Resolution 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. © 2026 NXP B.V.