

SP5 Automotive MCUs

KPIT K-SAR solution for AUTOSAR



Comprehensive AUTOSAR solution for SPC5 32-bit automotive MCUs

Member of the AUTOSAR (AUTomotive Open System ARchitecture) worldwide development partnership since 2005, KPIT offers a comprehensive AUTOSAR solution dedicated to ST's SPC5 32-bit automotive MCUs. The K-SAR AUTOSAR Suite consists of a proven and deployment-ready Base Software Stack (BSW) that includes K-SAR Embedded as well as the C4K-SAR and K-SAR Editor. The BSW is fully validated with the ST MCAL and contains all the basic modules as per AUTOSAR standards. Flexible licensing models ensure support for all customers' needs in terms of demonstrations and pre-series production.

KEY FEATURES K-SAR EMBEDDED

- Multicore support
- Partial networking for power-efficient ECUs
- Timing & memory protection for safety-critical ECUs
- End-to-end communication protection for hardware and software fault detection
- Ethernet for high bandwidth requirements

KEY FEATURES C4K-SAR/K-SAR EDITOR

- Simple-to-use Windows-based tool
- User-friendly GUI
- Support for MRU (Most Recently Used) features
- Validation tool verifies the module's configuration is correct and complete
- For any inconsistencies / dependencies, the Editor displays errors / information / messages in the 'Message Info' window
- Storing and loading of user configuration data
- Import of AUTOSAR ECU Extract, DBC, LDF and Fibex data
- HTML report generator
- RTE independent



K-SAR SOLUTION FOR SPC5 32-BIT MICROCONTROLLERS

Designed for developing and testing automobile electronic applications, K-SAR solutions ensure access to all hardware features of SPC5 32-bit microcontrollers. Developers can use this suite to create complete applications integrating the software components with the AUTOSAR OS (SC1/SC2/SC3/SC4), diagnostic modules, communication/memory stacks, and mode management.

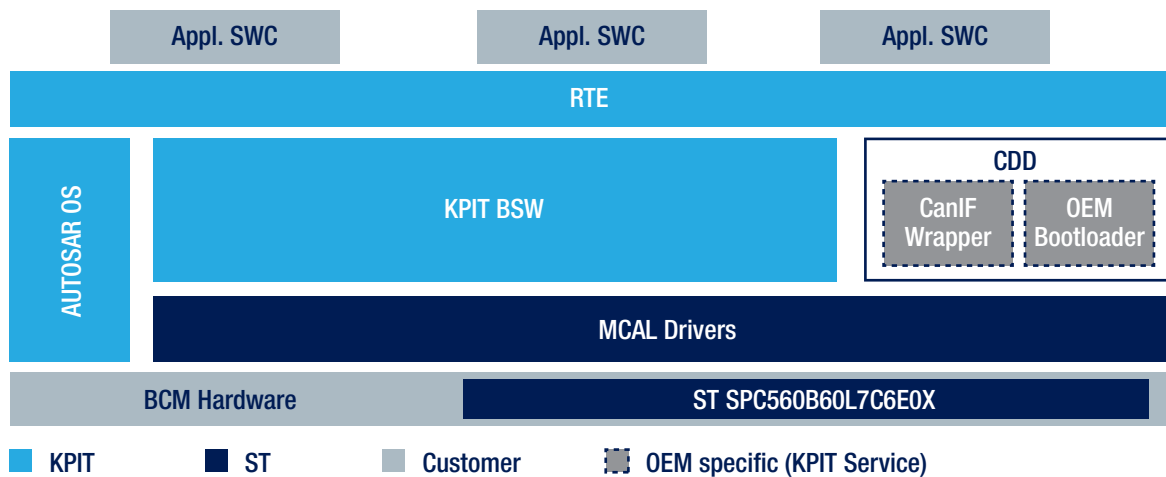
Developers can rely on Bootloader support and ask KPIT's dedicated software service to design, implement and integrate customized features inside a full AUTOSAR compliant CDD (Complex Device Driver) component.

The suite incorporates all the modules suitable for software calibration such as XCP and Diagnostic Log and Trace. KPIT and ST collaborate to roll out mature products that are ready to use in series production. Both

companies are fully engaged to provide exigent customers best-in-class support.

The K-SAR Solution is recommended for use in products with safety requirements and projects based on security stacks.

C4K-SAR/K-SAR AUTOSAR COMPONENTS



KSAR EMBEDDED SW COMPONENTS

Function stack	Supported device	OSEK/AR version	Supplier
Bootloader	SPC560B60	OEM specific	KPIT
OS	SPC560B60, SPC560B64, SPC56EL60, SPC56EC74 SPC58XX (planned)	AUTOSAR R4.0.3	KPIT
CCP	NA	NA	
XCP	SPC560B60, SPC560B64, SPC56EL60, SPC56EC74, SPC58XX (planned)	AUTOSAR R4.0.3	KPIT
AUTOSAR NM	SPC56EL60, SPC56EC74 SPC58XX (planned)	AUTOSAR R4.0.3	KPIT
AUTOSAR COM	SPC56EL60, SPC56EC74, SPC58XX (planned)	AUTOSAR R4.0.3	KPIT
Memory stack	SPC560B60, SPC560B64, SPC56EC74, SPC58XX (planned)	AUTOSAR R4.0.3	KPIT
Security	SPC58EC (planned)	AUTOSAR R4.3.x	KPIT
MCAL	SPC560B60, SPC560B64, SPC56EL60, SPC56EC74, SPC58XX	AUTOSAR R4.0.3	ST

