Robust software
development kit
for automotive
microcontrollers

S32 Software Development Kit (SDK)

The S32 Software Development Kit is an extensive suite of peripheral abstraction layers, peripheral drivers, RTOS, stacks and middleware designed to simplify and accelerate application development on NXP® automotive microcontrollers.

OVERVIEW

Designed to create synergy between the NXP automotive microcontrollers and customer applications, the S32 Software Development Kit can reduce time-to-market by providing free-of-charge and automotive-qualified software components.

To further accelerate the development, the software components can be configured using a graphical-based configurator that verifies dependencies and possible resource conflicts.
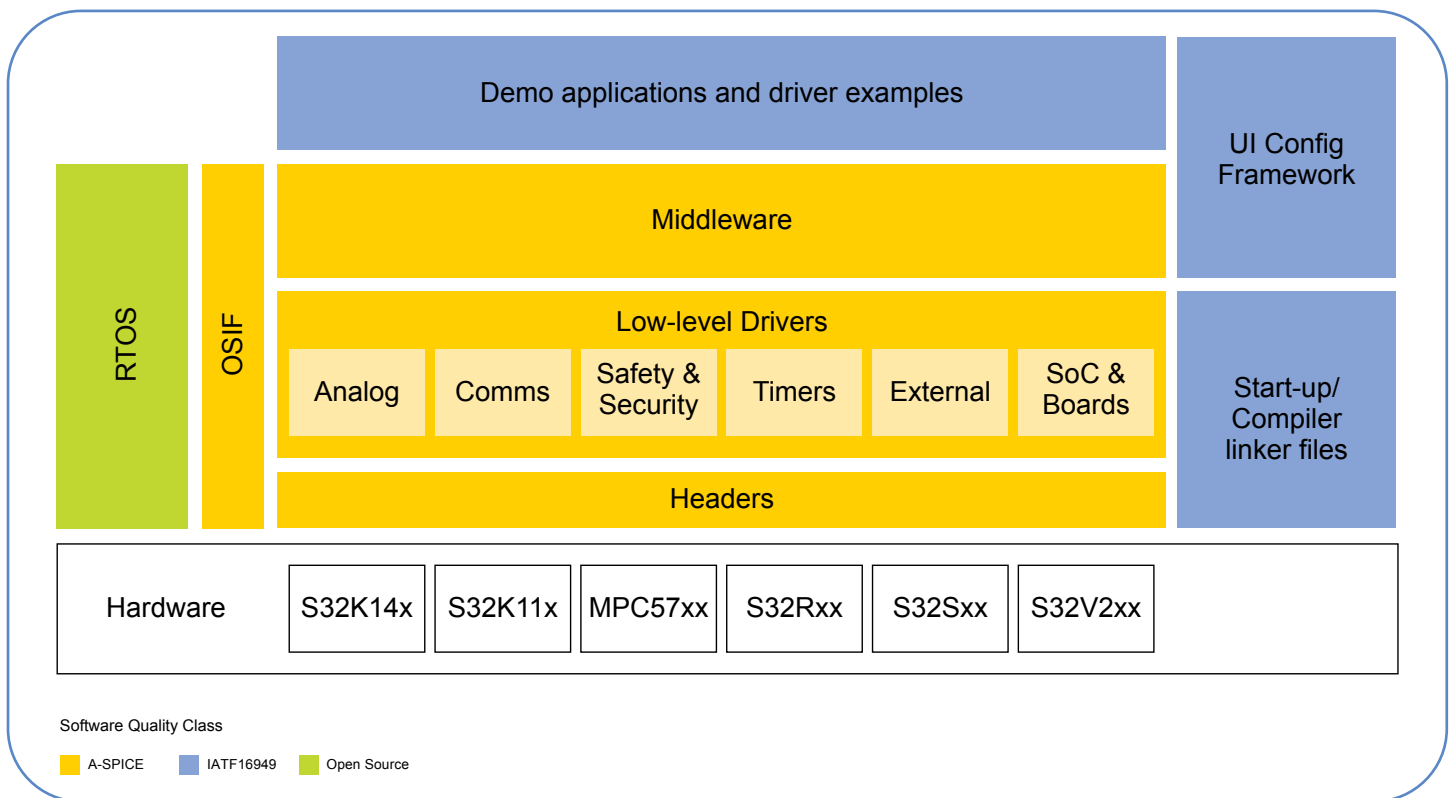
The extensive list of examples and demo applications bundled in the product will help users accommodate with the product and platform.

FEATURES

‣ Production-grade software

‣ Free of charge

‣ Graphical-based configuration

‣ Layered software architecture

‣ Support for free and premium toolchains

‣ Documented source code and examples

‣ Multiple device families support

‣ Integrates various stacks, middleware and RTOS

‣ Integrated in multiple IDEs

S32 SDK ARCHITECTURE

Demo applications and driver examples

RTOS

OSIF

UI Config Framework

Middleware

Low-level Drivers

| Analog | Comms | Safety & Security | Timers | External | SoC & Boards |

Headers

Start-up/ Compiler linker files

| Hardware | S32K14x | S32K11x | MPC57xx | S32Rxx | S32Sxx | S32V2xx |

Software Quality Class

■ A-SPICE   ■ IATF16949   ■ Open Source

S32 SDK ARCHITECTURE

	Supported Devices	Supported Toolchains	Supported IDEs	Middleware and Stacks	Integrated NXP® Software	Supported OS	Graphical Configurator
S32 SDK for S32K1xx	S32K11x S32K14x	GNU C Green Hills® MULTI® Wind River DIAB IAR Arm® C	S32 Design Studio for Arm IAR Embedded Workbench Green Hills Multi IDE KEIL µVision	LIN TCP/IP	AMMCLib sCST SBC UJA113x SBC UJA1169 TJA110x	FreeRTOS™	Processor Expert
S32 SDK for Power Architecture®	MPC574xB-C-G MPC574xP MPC574xR MPC5777C MPC5775B-E S32R274 S32R372	GNU C Green Hills MULTI Wind River DIAB	S32 Design Studio for Power Green Hills Multi IDE	TCP/IP FATFS SDHC USB	sBoot SBC FS65 TJA110x	FreeRTOS	Processor Expert
S32 SDK for S32V23x	S32V23x	GNU C Green Hills MULTI Wind River DIAB	S32 Design Studio Green Hills MULTI IDE	TCP/IP FATFS SDHC	TJA110x	FreeRTOS	S32 Configuration Tool

www.nxp.com/S32SDK