Amazon Web Services (AWS) Libraries for S32K3 automotive general-purpose MCUs addresses the connectivity and security challenges that automakers face when building connected automotive applications.

The AWS Libraries for S32K3 include NXP’s reference software and the FreeRTOS® libraries.

Leveraging AWS IoT Core, S32K3 establishes communication with AWS cloud, transmitting vehicle data for processing and analysis and facilitating actions on data through AWS Cloud Services. S32K3 not only enables cloud connectivity, but also has the capability for over-the-air (OTA) updates unlocking the value of vehicle data and leveraging edge-to-cloud services.

User Guide
AWS Libraries Architecture Block Diagram

S32DS Demo Applications

Device Shadow
Device Defender
OTA Agent

coreMQTT
coreMQTT Agent
coreJSON
Backoff algorithm
corePKCS11

Flash file system
OTA PAL
PKCS11
Network Transport

S32 Design Studio (S32DS) + S32 Config Tool (S32CT)

S32K3 Software Ecosystem Using AWS Block Diagram

Applications

FreeRTOS Kernel

AWS Libraries for S32K3

Mbed TLS
TCP/IP

NXP Real-Time Drivers

S32 Design Studio (S32DS) + S32 Config Tool (S32CT)
View additional information for AWS Libraries for S32K3.

Note: The information on this document is subject to change without notice.