S32K3 SAF Quick Start Guide
**WHAT IS SAF (SAFETY SOFTWARE FRAMEWORK)**

Premium safety software product provided by NXP ([s32-safety-software-framework-saf](https://www.nxp.com))

**Software modules providing safety functions:**
- Device HW self test
- Operation mode selection
- Safety checks / tests
- Device recovery

**Compatible** solution across NXP S32 processors

**Quality:** Automotive grade production quality

**Safety:** ISO 26262 Functional Safety compliance (up to ASIL-D)
## S32K3 SAF DELIVERABLES

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S32K3 SAF DOWNLOAD

Available from nxp.com under:
MY NXP->Software Licensing and Support->S32K3 Premium Software->S32K3 - Safety Software Framework:

- Standalone installer (exe)
- S32 Design Studio installer (update site zip)
- Quality Package, Safety Package, Software Content Register, Release Notes
- List of Known Defects
S32K3 STANDALONE INSTALLATION

SAF is installed in `c:\NXP\S32K3_SAF_1.0.0`:

- SAF modules
  - Bist: Built in self test
  - eMcem: Extended microcontroller error manager
  - mSel: Mode selector
  - sBoot: Safe boot
  - sCheck: Square check, check the checkers component
  - sReco: Software recovery

- Check the release notes for information about the release
BUILD AND RUN SAF DEMO

SAF demo available showing usage of all modules:
- mSel mode selection
- sCheck startup/runtime/shutdown tests
- eMcem fault handling
- sBoot checks
- mSel/sReco shutdown

Build from command line by command:
launch.bat

Debug on board using debugger scripts in
c:\NXP\S32K3_SAF_1.0.0\S32_SAF_Demo\config\S32K3XX
DOCUMENTATION TO START WITH

- SAF release notes (*S32K3_SAF_1.0.0_ReleaseNotes.txt*)

- SAF modules *user manuals* (doc folder in each module folder, for example *S32K3_SAF_SCHECK_UM.pdf*)


- SAF *demo user manual* (*S32K3_SAF_IA_UM.pdf*)

- ISO26262 Functional Safety standard (available from ISO)
SAF PREMIUM SOFTWARE

- SAF is a premium software so license fee has to be paid

- To get access to software/price information contact NXP sales/marketing (NXP support)

- Any more questions? Ask on NXP support