

## Secure Provisioning SDK (SPSDK) SPSDK

Last Updated: Feb 27, 2025

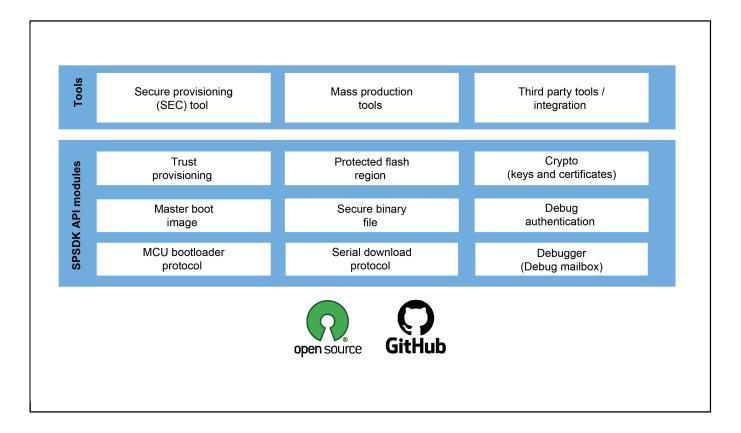
NXP provides MCUXpresso Secure Provisioning (SEC) and Secure Provisioning SDK (SPSDK) for trial run and mass production use. Both SEC tool and SPSDK support secure programming and device provisioning on NXP's microcontrollers and i.MX 9 applications processors at the production stage.

MCUXpresso Secure Provisioning (SEC) tool is a GUI-based tool which leverages low-level functionality of the open-source SPSDK with its binary executables released as part of the SEC tool. The SEC tool graphical interface makes production flow simpler for general needs of a production process.

Secure Provisioning SDK (SPSDK) is an open-source development kit with its source code released on Github and PyPI. It contains a set of API modules for custom production tool development which requires more advanced secure provisioning flow. SPSDK enables connection and communication with NXP's microcontrollers and i.MX 9 applications processors for the following purposes:

- Generation of Secure Binary (SB) bootable images
- Security features configuration (CMPA, CFPA, Trustzone, secure bootloader, debug authentication, etc.)
- Generation and management of cryptographic keys and certificates
- Trust provisioning and secure programming
- Debug authentication through J-Link, PEmicro and PyOCD debug probes

## Secure Provisioning SDK Block Diagram Block Diagram



View additional information for Secure Provisioning SDK (SPSDK).

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. © 2025 NXP B.V.