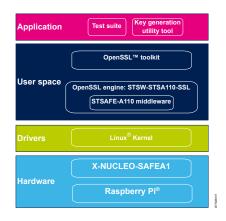


STSAFE-A110 OpenSSL® engine software package



Features

- Integrates STSAFE-A110 authentication service within OpenSSL® library
- Extends the OpenSSL® cryptographic toolkit features through the use of the STSAFE-A110 solution
- Relies on the STSAFE-A110 middleware
- Includes a test suite and various examples

Description

This package provides an $OpenSSL^{\otimes}$ engine for any Linux application using the STSAFE-A110 hardware.

The STSAFE-A110 is a secure element providing authentication and secure data management services to a local or remote host. It is a full turnkey solution with a secure operating system running on the latest generation of secure microcontrollers







1 Setting up the hardware environment

This section describes the hardware components needed for developing a secure application.

1.1 STSAFE-A1xx expansion board

The hardware environment includes the STSAFE-A1xx expansion board (X-NUCLEO-SAFEA1). The figure below illustrates the board.





1.2 Raspberry Pi[®] model board

A Raspberry Pi[®] model board is also required as part of the hardware environment. Information about Raspberry Pi (RPi) boards is available at: https://www.raspberrypi.org/. The figure below provides an illustration of this type of board.

Figure 2. Raspberry Pi board



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2 License

STSW-STSA110-SSL is delivered under STMicroelectronics' *Software package license agreement (SLA0087*). The table below shows the different license schemes delivered with the software components provided in this package.

Table 1. License schemes

Software components	Owner	License
X-CUBE-SAFEA1 application programming interface (API)	STMicroelectronics	SLA0088
Demonstration codes	STMicroelectronics	SLA0088
OpenSSL® API interface(1)(2)	The OpenSSL® Project	OpenSSL® License
API interface ⁽¹⁾	Eric Young (eay@cryptsoft.com)	Original SSLeay License

This product includes software developed by the OpenSSL[®] Project for use in the OpenSSL[®] Toolkit (https://www.openssl.org/).

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^{2.} OpenSSL is a registered trademark owned by the OpenSSL Software Foundation.



Revision history

Table 2. Document revision history

Date	Version	Changes
10-Dec-2020	1	Initial release.
25-Apr-2023	2	Changed location of STSECURE logo Updated: Features Cover image Section 2 License

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