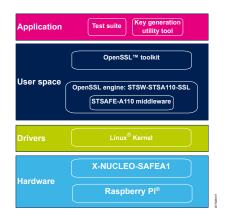


# STSAFE-A110 OpenSSL® engine software package



#### **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<sup>®</sup> model board

A Raspberry Pi<sup>®</sup> 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 <sup>(1)</sup>                          | Eric Young (eay@cryptsoft.com) | Original SSLeay License |

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

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<sup>2.</sup> 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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