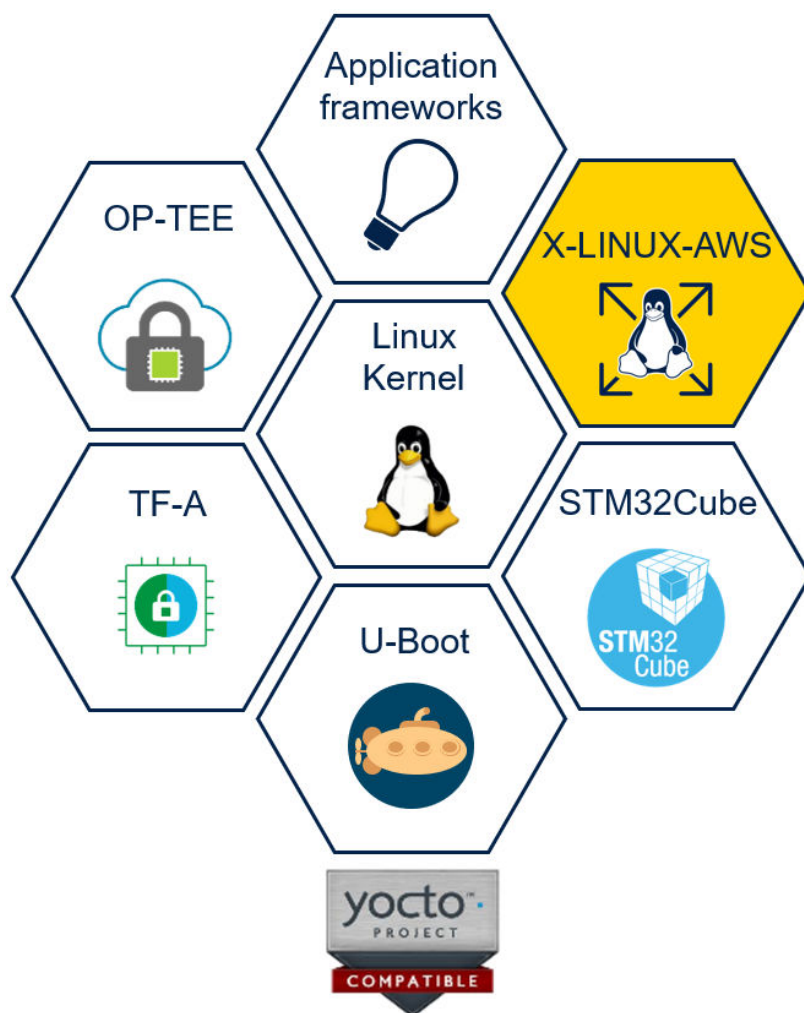




AWS IoT Greengrass™ Expansion Package for STM32 MPU OpenSTLinux



DT73557V1

Product status link

[X-LINUX-AWS](#)



Features

- AWS IoT Greengrass™ V2 integration
- Secured credential storage with one of the following solutions
 - OP-TEE
 - TPM with the [X-LINUX-TPM](#) integration
- Application sample based on GTK® to publish and subscribe on MQTT topics
- Compatible with the Yocto Project® build system Scarthgap
- Validated over the OpenSTLinux Distribution v6.0 on [STM32MP135F-DK](#), [STM32MP257F-DK](#), and [STM32MP257F-EV1](#)

Description

[X-LINUX-AWS](#) is an STM32 MPU OpenSTLinux Expansion Package that targets Amazon Web Services® AWS IoT Greengrass™ V2 for STM32MP13xx and STM32MP25xx microprocessors.

It integrates the Greengrass nucleus component to connect to AWS IoT Core™ to start and accelerate the development of an IoT solution.

In addition, this OpenSTLinux Expansion Package provides good security practices with the integration of a secure solution for credential storage. This solution is based on the usage of OP-TEE or TPM with [X-LINUX-TPM](#) integration.

[X-LINUX-AWS](#) includes a demonstration application in which the AWS IoT Greengrass™ core device subscribes and publishes on a local MQTT network and on AWS IoT Core™. This is achieved through the component deployment of an MQTT broker and bridge.

1 General information

The X-LINUX-AWS Expansion Package runs on STM32 microprocessors based on Arm® Cortex® processors.

Note: Arm is a registered trademark of Arm Limited (or its subsidiaries) in the US and/or elsewhere.

arm

1.1 Ordering information

X-LINUX-AWS is available for free download from the www.st.com website.

1.2 Versioning

Since its release v5.1.0, the major and minor versions of the X-LINUX-AWS OpenSTLinux Expansion Package are aligned on the major and minor versions of the OpenSTLinux Distribution. This prevents painful backward compatibility attempts and makes dependencies straightforward.

The X-LINUX-AWS generic versioning vx.y.z is built as follows:

- **x**: major version matching the OpenSTLinux Distribution major version. Each new major version is incompatible with previous OpenSTLinux Distribution versions.
- **y**: minor version matching the OpenSTLinux Distribution minor version. Each new minor version might be incompatible with previous OpenSTLinux Distribution versions.
- **z**: patch version to introduce bug fixes. A patch version is implemented in a backward-compatible manner.

1.3 License

X-LINUX-AWS is delivered under the *Mix Ultimate Liberty+OSS+3rd-party V1* software license agreement (SLA0048).

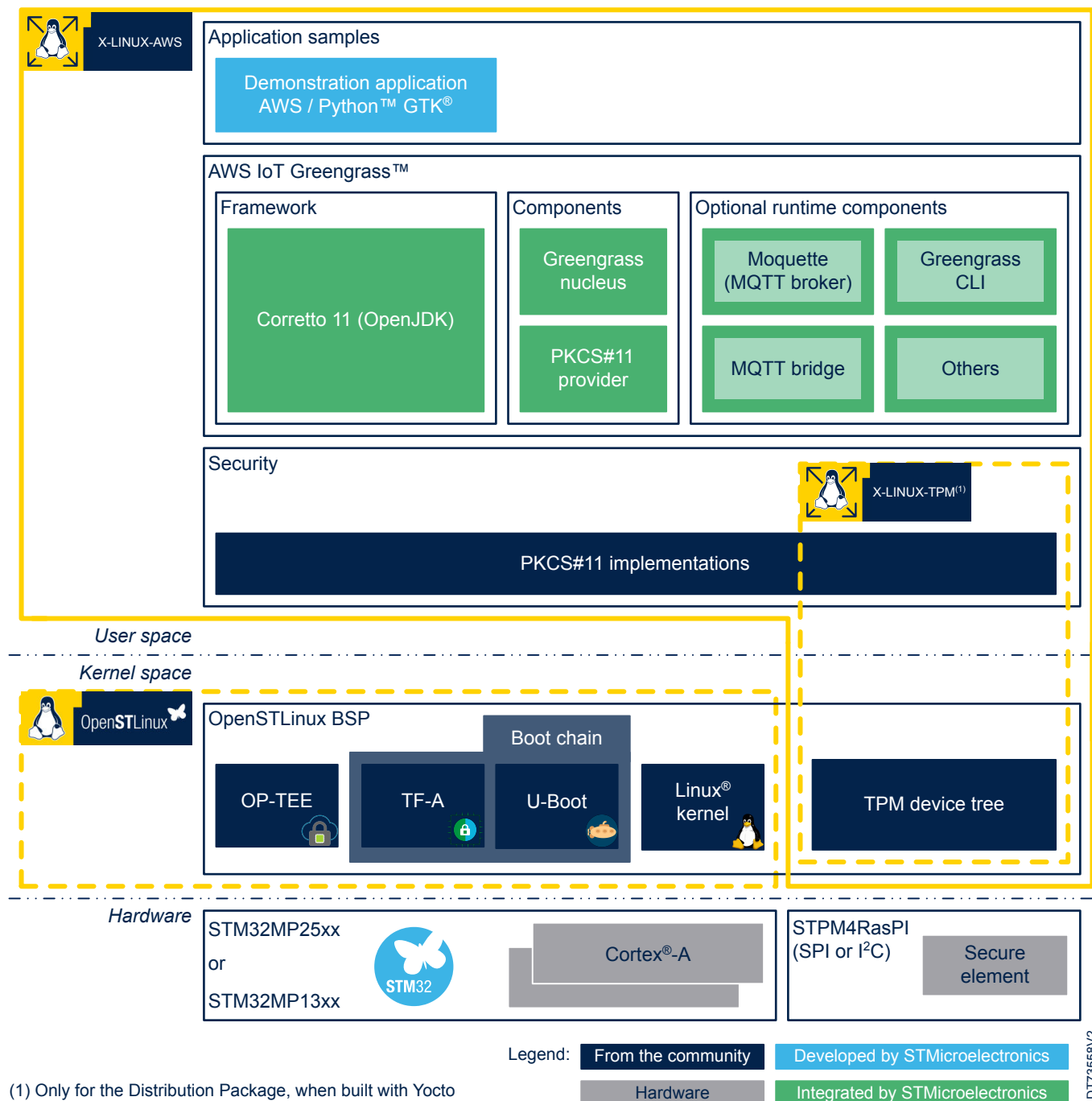
Software component license agreements

The software components provided in this package come with different license schemes. Refer to wiki.st.com/stm32mpu/wiki/X-LINUX-AWS_licenses for details.

2 Software architecture

The top-level architecture of the X-LINUX-AWS OpenSTLinux Expansion Package is shown in Figure 1.

Figure 1. X-LINUX-AWS architecture



DT73558V2

Revision history

Table 1. Document revision history

Date	Revision	Changes
29-Feb-2024	1	Initial release.
25-Jun-2024	2	Updated: <ul style="list-style-type: none"> Ecosystem 5.1 <i>Versioning</i> Added: <ul style="list-style-type: none"> Support for STM32MP257F-EV1
06-Dec-2024	3	Updated: <ul style="list-style-type: none"> Ecosystem 6.0 Added: <ul style="list-style-type: none"> Support for STM32MP257F-DK

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