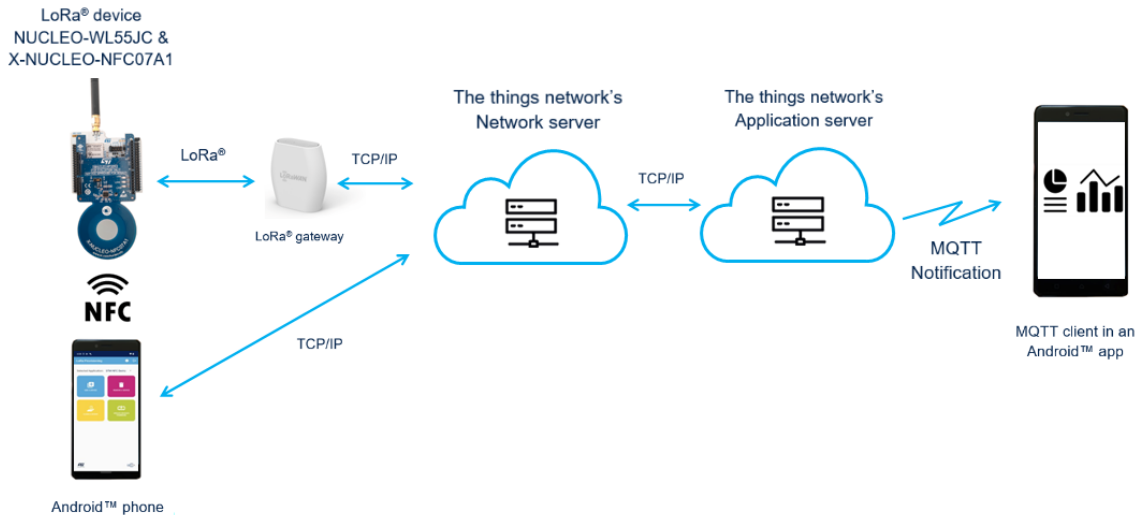


STM32WL firmware for ST25DV64KC LoRa[®] provisioning demonstration



Product status link

[STSW-ST25DV010](#)

Features

- Key provisioning of a LoRa[®] device
- Registration of a LoRa[®] device on a LoRaWAN[®] server
- Transmission of LoRa[®] events and data via MQTT notifications
- Display of data coming from a LoRa[®] device

Description

This demonstration is a joint development between STMicroelectronics and ISCA-Lab from Hellenic Mediterranean University. LoRa[®] is a long-range, low data rate and lower-power wireless communication system used in Industrial IoT applications like smart metering, sensor monitoring, alarm.

Each LoRa[®] device is provisioned with some cryptographic keys and registered on a LoRaWAN[®] network.

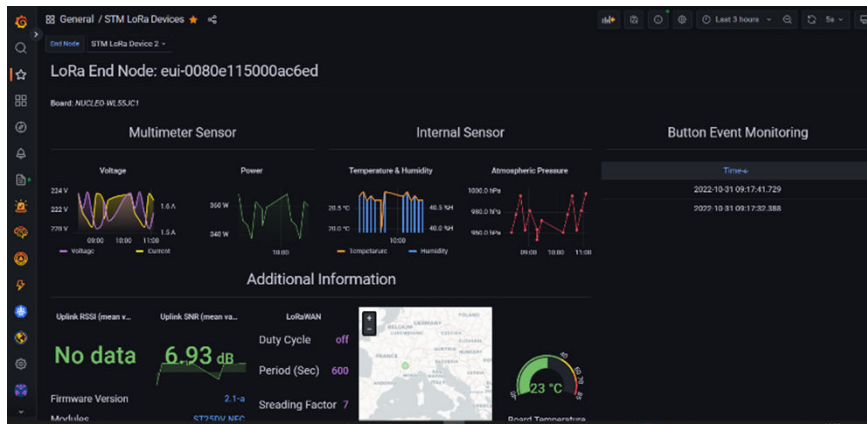
The current demonstration shows how a ST25DV64KC NFC Tag can be used to:

- facilitate the provisioning of a LoRa[®] device with keys.
- register the device on a LoRaWAN[®] network.

This demonstration leverages on The Things Network's LoRaWAN[®] infrastructure.

Once this registration is done, a dashboard, displayed in a web browser or on a smartphone, can be used to monitor all the data coming from the LoRa[®] device.

Figure 1. Example of dashboard displaying the LoRa® data



The following packages are available on www.st.com for this demonstration:

- STSW-ST25DV010 STM32WL55 firmware
- STSW-ST25010 Android™ application

1 General information

The firmware includes drivers running on a STM32WL microcontroller, which embeds a Arm[®] core.

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



Revision history

Table 1. Document revision history

Date	Version	Changes
01-Mar-2023	1	Initial release.
08-Mar-2023	2	Updated Section Description



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