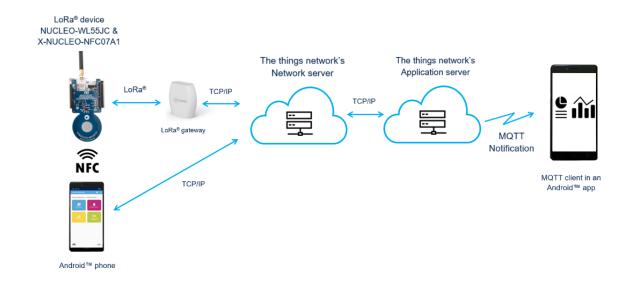


Android™ application for ST25DV64KC LoRa® provisioning demonstration



Product status link

STSW-ST25010

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 joined 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 leverage on The Things Network's LoRaWAN® infrastructure.

Once this registration 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

DB4970 - Rev 2 page 2/8



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.

arm

DB4970 - Rev 2 page 3/8



Revision history

Table 1. Document revision history

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

DB4970 - Rev 2 page 4/8





Contents

1	General inf	ormatior	າ	 	• • •	• • • •	 • • •	 	 • • •	• • • •	 • • •	• • •	 	 	3
Revi	ision history	<i>,</i>		 			 	 	 		 		 	 	4

DB4970 - Rev 2





	- 4		4		
I i c	`	\sim +	+0	h	es
	•				

Table 1.	Document revision history	V						4
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DB4970 - Rev 2 page 6/8





List of figures

Eio	iure 1.	Example of dashboard displaying the LoRa® data	-
LIG	juie i.	Example of dashboard displaying the Lona data	_

DB4970 - Rev 2 page 7/8



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DB4970 - Rev 2 page 8/8