

Firmware for ST25DV-I2C BLE out of band pairing

Data brief

Features

- Bluetooth® Low Energy (BLE) pairing with OOB (out-of-band) information exchanged through NFC using ST25DV-I2C series Dynamic NFC Tags
- Secure BLE connection
- Secure simple pairing
- Protection against MITM (man-in-the-middle) attacks

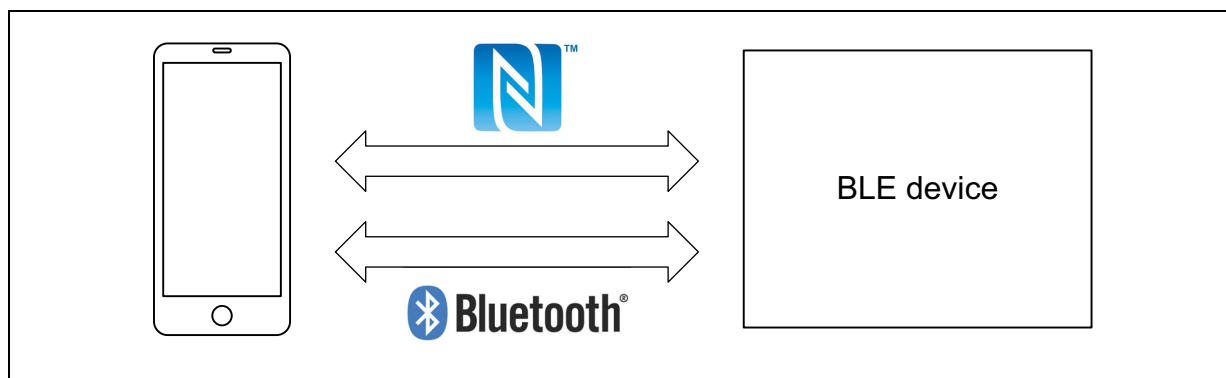
Description

The ST25DV-I2C BLE out-of-band pairing demonstration firmware shows how NFC can be used to improve the security of BLE connections.

NFC provides an additional communication channel between a Bluetooth® device and an Android™ phone. This extra communication channel is used to exchange data (called out-of-band data) used during the Bluetooth pairing, preventing MITM attacks.

This firmware (STSW-ST25DV004), an Android application and its source code (respectively, STSW-ST25005 and STSW-ST25006), and user manual UM2710 are available on www.st.com.

An STM32WB55 microcontroller (on the MB1355C board) and an X-NUCLEO-NFC04A1 board are required to run the demonstration software.



1 License scheme

This firmware is delivered under the SLA0052 software license agreement.

The software components provided in this package come with different license schemes, as shown in [Table 1](#).

Table 1. License scheme

Component	Copyright	License
Application projects	STMicroelectronics	SLA0052
LibNDEF		
Board support package (BSP)		SLA0044
STM32WB HAL/LL APIs		
STM32WB Bluetooth [®] HCI		
STM32WB Bluetooth [®] stack		
STM32WB Bluetooth [®] profiles and services		
STM32WB Bluetooth [®] /Thread [®] concurrent stack		
Cortex [®] -M CMSIS v4.5.0	Arm [®] (1)	BSD 3-Clause

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

2 Revision history

Table 2. Document revision history

Date	Revision	Changes
01-Apr-2020	1	Initial release.
06-May-2020	2	Updated <i>Description</i> .

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