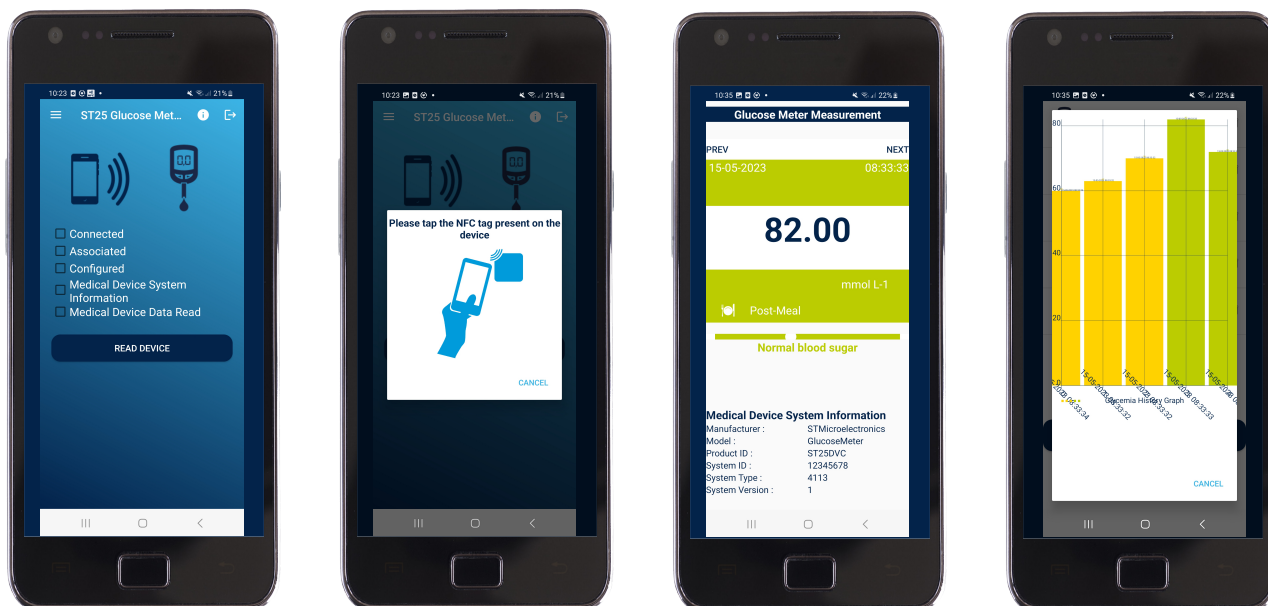# Android™ application for ST25DV personal health device (PHD) demonstration

STSW-ST25012 Android™ application running the PHDC demonstration with the ST25DV64KC Discovery kit

Product status link
STSW-ST25012

Features

- Collects diabetes data (blood glucose level, insulin doses, meal conditions) from a simulated glucometer device running on the ST25DV64KC-DISCO
- Uses NFC for an easier connection and data collection
- Visualization of data trends for a better understanding of the patient's data
- ISO/IEEE 11073-20601 personal health device communication (PHDC) exchange between agent and manager
- ISO/IEEE 11073-10417 device specialization for glucometer agent (simulated)
- Automatic detection of transport implementation between:
    – NFC Forum PHDC using NDEF exchanges
    – Fast transfer mode (FTM) with ST25DV64KC

Description

The STSW-ST25012 is an Android™ application based on the open-source Antidote ISO/IEEE 11073 protocol stack library for collecting and visualizing the diabetes data from a simulated glucometer device running on the ST25DV64KC-DISCO Discovery kit.

The ISO/IEEE 11073 personal health device (PHD) standards are a set of standards that address the interoperability of medical devices and associated data.

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The STSW-ST25012 demonstrates the NFC usage to establish connection and communicate easily with the agent device using the ISO/IEEE 11073-20601 PHDC standard.

Diabetes data such as blood glucose level, insulin doses, and meal conditions are displayed under a user friendly interface for a better monitoring information.

The STSW-ST25012 package contains the Google Play™ store link and the binary file (APK) for installing the Android™ application, as well as all the source files for compiling the ST25DV PHDC demonstration.

The following STMicroelectronics products contribute to the ST25DV PHDC demonstration:

- Software:
    - STSW-ST25DV012: STM32L476VG firmware for the ST25DV PHDC demonstration
    - STSW-ST25012: Android™ application for the ST25DV PHDC demonstration
- Hardware:
    - ST25DV64KC-DISCO: ST25 Discovery kit with ST25DV64KC antenna

1 General information

STSW-ST25012 is demonstrated with the STSW-ST25DV012 running on the STM32L476VG STM32 microcontroller, which embeds an Arm® Cortex®-M4 processor.

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

1.1 Ordering information

STSW-ST25012 is available for free download from the *www.st.com* website.

1.2 License

STSW-ST25012 is delivered under the *Mix_MyLiberty* software license agreement SLA0052 and its Additional License Terms.

Revision history

Table 1. Document revision history

Date	Revision	Changes
24-May-2023	1	Initial release.

IMPORTANT NOTICE – READ CAREFULLY