

## Antenna reference boards for ST25DV04K dual interface EEPROM

Data brief



### Description

The ANT-1-6-ST25DV antenna reference kit is a ready-to-use kit containing two boards, each of them featuring a ST25DV04K Dual Interface EEPROM IC connected to an RF etched antenna on one side, and to an I<sup>2</sup>C bus on the other side.

The ANT-1-6-ST25DV antenna kit allows system designers to evaluate the ST25DV04K performance, capabilities, and to get started with their design.

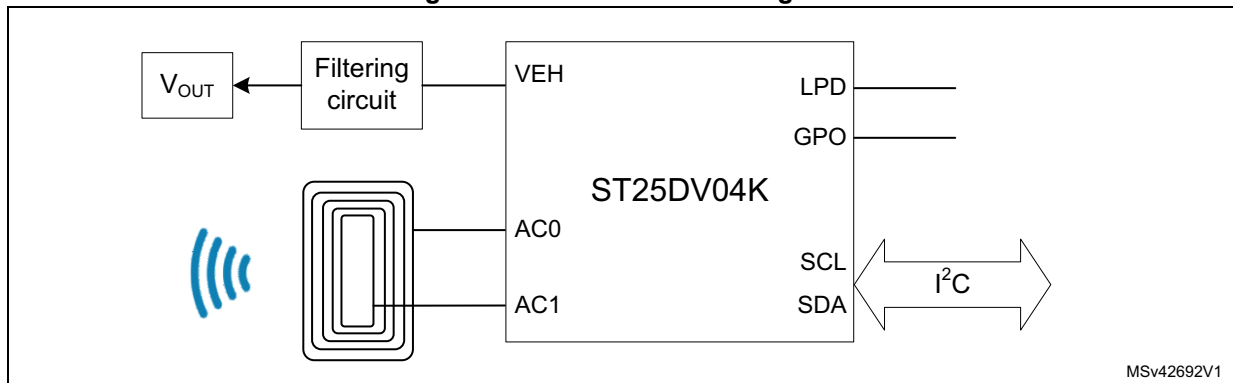
To demonstrate the energy harvesting function, the ANT-1-6-ST25DV can be used in conjunction with the DEMO-CR95HF-A demonstration board.

The ANT-1-6-ST25DV PCB files can be downloaded from [www.st.com](http://www.st.com).

### Features

- Ready-to-use printed circuit board (PCB) including:
  - 45 mm x 75 mm (ST25DV\_Discovery\_ANT\_C1) and 18 mm x 24 mm (ST25DV\_Discovery\_ANT\_C6), 13.56 MHz single layer inductive antenna etched on the PCB
  - ST25DV04K dual interface EEPROM
  - Mates with ST25Dx\_DISCOVERY\_MBOARD connector
  - Energy harvesting output (V<sub>OUT</sub>) with a 10 nF capacitance filtering circuit

Figure 1. Functional block diagram



# 1 Associated PC software

The ANT-1-6-ST25DV kit is supported by the PC software and by the Dual Interface EEPROM tool that allows to configure and control the energy harvesting. This software is available on [www.st.com](http://www.st.com).

## **2 Federal Communications Commission (FCC) and Industry Canada (IC) compliance statements**

### **2.1 FCC Compliance Statement**

#### **2.1.1 Part 15.19**

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

#### **2.1.2 Part 15.105**

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference's by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and the receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

#### **2.1.3 Part 15.21**

Any changes or modifications to this equipment not expressly approved by STMicroelectronics may cause harmful interference and void the user's authority to operate this equipment.

## **2.2 Formal notices required by the Industry Canada ("IC")**

### **2.2.1 Compliance Statement**

This device complies with Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation.

### **2.2.2 Declaration de Conformité**

Le présent appareil est conforme aux CNR d'Industrie Canada applicables aux appareils radio exempts de licence. L'exploitation est autorisée aux deux conditions suivantes: (1)

## **Federal Communications Commission (FCC) and Industry Canada (IC) compliance statements**

---

l'appareil ne doit pas produire de brouillage, et (2) l'utilisateur de l'appareil doit accepter tout brouillage radioélectrique subi, même si le brouillage est susceptible d'en compromettre le fonctionnement.

### 3 Revision history

Table 1. Document revision history

Date	Revision	Changes
10-Mar-2017	1	Initial release.
22-Jun-2017	2	Updated: – <i>Features</i> – <i>Description</i> – <i>Section 1: Associated PC software</i>
06-Nov-2017	3	Updated: – <i>Features</i>

**IMPORTANT NOTICE – PLEASE READ CAREFULLY**

STMicroelectronics NV and its subsidiaries ("ST") reserve the right to make changes, corrections, enhancements, modifications, and improvements to ST products and/or to this document at any time without notice. Purchasers should obtain the latest relevant information on ST products before placing orders. ST products are sold pursuant to ST's terms and conditions of sale in place at the time of order acknowledgement.

Purchasers are solely responsible for the choice, selection, and use of ST products and ST assumes no liability for application assistance or the design of Purchasers' products.

No license, express or implied, to any intellectual property right is granted by ST herein.

Resale of ST products with provisions different from the information set forth herein shall void any warranty granted by ST for such product.

ST and the ST logo are trademarks of ST. All other product or service names are the property of their respective owners.

Information in this document supersedes and replaces information previously supplied in any prior versions of this document.

© 2017 STMicroelectronics – All rights reserved