STSW-ST25R004

Antenna matching tool for ST25R NFC/HF readers

Features

- STSW-ST25R004 is a software that calculates the matching network for antennas connected to ST25R NFC/HF readers, using Qucs (Quite Universal Circuit Simulator) to simulate the antenna and the matching network characteristics
- The software supports the following products:
    - ST25R500/ST25R501
    - ST25R300
    - ST25RN300
    - ST25R100/ST25R200
    - ST25R3920/ST25R3920B
    - ST25R3919B
    - ST25R3918
    - ST25R3917/ST25R3917B
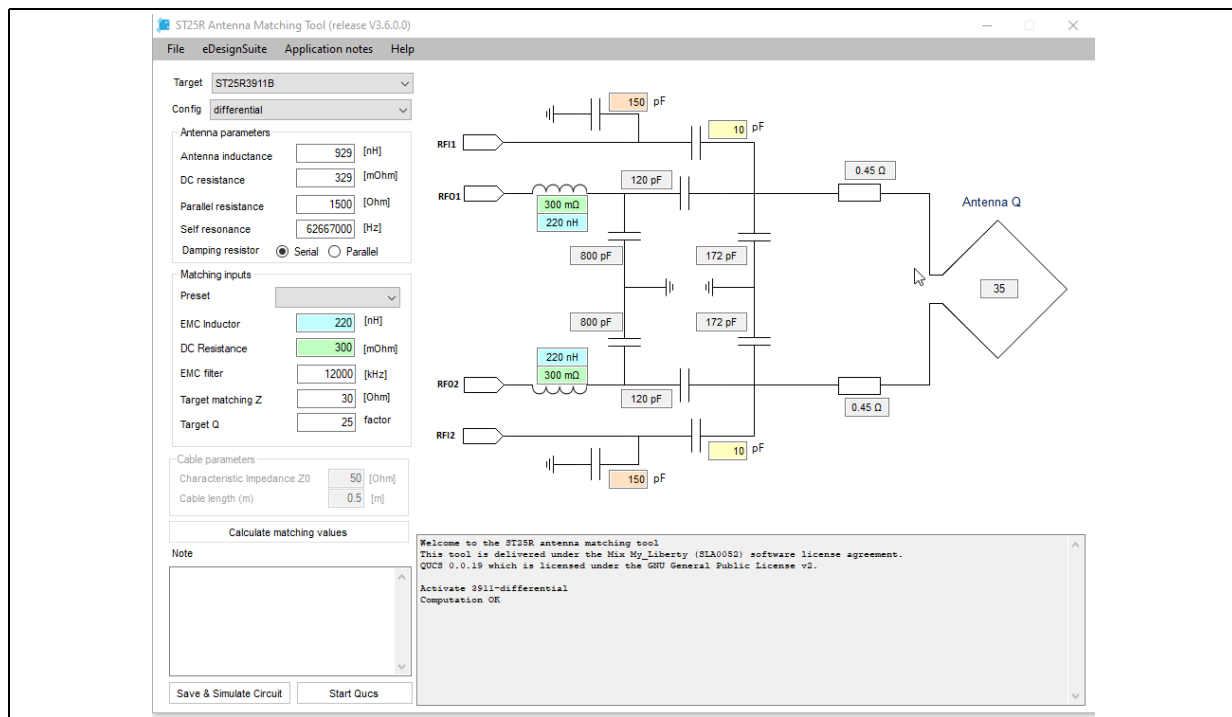   - ST25R3916/ST25R3916B
    - ST25R3915
    - ST25R3914
    - ST25R3912
    - ST25R3911B

Description

STSW-ST25R004 contains a graphical user interface (GUI) to specify the antenna parameters and the target matching. It performs transient, AC, and S-parameter simulations of the calculated antenna schematic.

An online version of the tool is available at https://eds.st.com. This is part of the ST eDesignSuite, an easy-to-use comprehensive software, helping customers during their design.

AN4974, AN5276, AN6065, and AN6092 (available on *www.st.com*) provide guidance on the measurement of the antenna parameters required as input for this matching tool, to define the best matching circuit.

For further information contact your local STMicroelectronics sales office.

www.st.com

1 License

STSW-ST25R004 is delivered under the Mix My_Liberty (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

Software component	Owner	License
ST25R Antenna Matching Tool binary	STMicroelectronics	ST proprietary
Qucs	Qucs team	GPL v2

2 Revision history

Table 2. Document revision history

Date	Revision	Changes
05-Jul-2017	1	Initial release.
19-Feb-2020	2	Updated document title, *Features* and *Description*. Added image on cover page and *Section 1: License*.
01-Jun-2021	3	Updated *Features* and *Description*.
24-Jun-2021	4	Updated *Description*.
03-May-2022	5	Updated document title, *Features*, and image on cover page.
26-Sep-2023	6	Updated *Features*.
17-Jul-2024	7	Updated document title, *Features*, and *Description*.
21-May-2025	8	Updated *Features* and *Description*.
23-Sep-2025	9	Updated *Features* and *Description*.

IMPORTANT NOTICE – READ CAREFULLY