

### ANT7-M24LR16E

# 15 mm x 15 mm double layer antenna reference board for the M24LR16E-R Dual Interface EEPROM

Data brief

#### **Features**

- Ready-to-use printed circuit board (PCB) including
  - 15 mm x 15 mm 13.56 MHz inductive antenna etched on the PCB
  - M24LR16E-R Dual Interface EEPROM
  - I<sup>2</sup>C connector
  - Energy harvesting output (V<sub>OUT</sub>) with a 10 nF capacitance filtering circuit
  - RF WIP/BUSY output with 20 kΩ pull-up resistor, to indicate that an RF operation is ongoing

#### **Description**

The ANT7-M24LR16E antenna reference board is a ready-to-use PCB that features an M24LR16E-R Dual Interface EEPROM IC connected to a 15 mm x 15 mm 13.56 MHz etched RF double layer antenna on one side, and to an I<sup>2</sup>C bus on the other side.



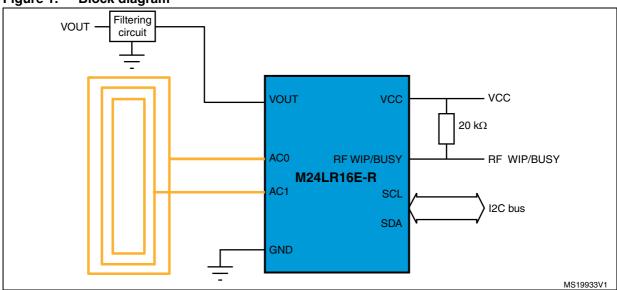
The ANT7-M24LR16E antenna allows system designers to evaluate the M24LR16E-R performance and capabilities, and to get started with their design.

To demonstrate the energy harvesting function, the ANT7-M24LR16E can be used in conjunction with ST DEMO-CR95HF-A demonstration board.

The application can be powered directly from the M24LR16E-R  $V_{OUT}$  pin.

The ANT7-M24LR16E Gerber files can be downloaded from http://www.st.com.

Figure 1. Block diagram



#### **Associated firmware and PC software**

The ANT7-M24LR16E board is supported by a PC software, the Dual Interface EEPROM tool software, that allows to configure and control the energy harvesting. This software is available from http://www.st.com.

Refer to application note AN3954 "Developing your own Visual Basic or C/C++ application on a DEMO-CR95HF-A demonstration board", for how to adapt the PC software for your application.

**577** 

ANT7-M24LR16E Revision history

## 1 Revision history

Table 1. Document revision history

Date	Revision	Changes
23-Jan-2012	1	Initial release.

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4/4

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