

NFC with Elektor and ST

Free NFC tag
in credit card format
for every Elektor Member

The experts agree that Near Field Communication (NFC) is going to play a major role in the upcoming 'Internet of Things' revolution. Using contactless data transfer you can wirelessly pay for goods, provide card holder authentication and exchange small amounts of information such as text messages and URLs etc.



Europe's largest semiconductor manufacturer, STMicroelectronics is a major player in this market and regular Elektor readers will already be familiar with the 32-bit STM32 family of microcontrollers and their associated evaluation boards. ST supply NFC-Reader/Writer chips as well as NFC tag chips, which can be read or written to by smartphones and other NFC-ready devices [1].

Tag chips, such as the ST25TA, are completely self contained and harvest energy directly from the electromagnetic field of the communication signal. They therefore require no battery or other external source of power so the tag can be made very compact, robust and durable. ST and other manufacturers supply NFC tags in coin, credit card and other package outlines.

Electronic business card

To help get Elektor readers up and running with this latest NFC technology we have arranged, together with STMicroelectronics, to give away a free ST25TA02K NFC tag with the next edition of Elektor*, sent out to all Elektor subscribers. The credit-card format means it fits easily into a wallet and can be used as an electronic business card. The ST25TA02K has a 256-byte EEPROM capacity and is an 'NFC Forum Type 4' tag, which uses the ISO/IEC14443A protocol (at 13.56 MHz).

That's not all: each free tag contains a URL and a unique code number. Using an NFC-ready smartphone together with an NFC app, the information on the tag will direct you to a website where you can enter your unique code number. If in addition you can supply the right answer to a simple question you're in with a chance of winning one of over 500 prizes up for grabs:

- 3 Bose Soundlink® Around-Ear Wireless Headphones
- 100 STMicroelectronics NFC Discovery Kits with 2 NFC Eval Boards
- 400 STMicroelectronics Cloud Boards with the ST25TA chip

More information in Elektor Magazine's January & February 2016 edition and www.elektormagazine.com/stmicro-nfc.



^{*} Elektor GREEN Members can go online to request the tag on www.elektormagazine.com/stmicro-nfc.

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