

NFC Communication Module

NCM Series

The NFC communication modules developed by Triovacos are ideal for application in different scenarios due to their modular design concept. The customer specific and application dependent dimensioning of the NFC modules is determined by the permitted geometric size on the one hand. If a self-powered module is mandatory for a specific application, then the required life time of the system battery has to be considered on the other hand. These requirements are linked to the synthesis of the HF aerial and the design of an energy efficient electronic circuit. Due to the competences of Triovacos in the areas of antenna design, circuit layout and software engineering we provide our customers innovative solutions.

During the implementation process the modules are adapted in close collaboration with our customers to the specific constraints of existing equipment.

Product features:

Protocol:

NFC to ISO 18092 - compatible to HF-RFID

Transmission rate:

106 Kbit/s up to 424 Kbit/s

Read range:

up to 5 cm (depending on the reader)

Peripheral interfaces:

USB (optional SPI or I2C)

Application examples:

NFC terminal for infotainment or POS applications:

The NFC communication module is composed of three main components: antenna, NFC- and USB interface (optional SPI or I2C). The module is controlled by a sophisticated NFC protocol stack, which provides full NFC functionality (read / write, peer-to-peer and card emulation) on different platforms (e.g. PC or embedded systems).

NFC transponder with dynamic content:

Everyday situations often require the extraction of data from one device and further processing on another device. A typical example is the acquisition of physiological parameters (e.g. blood pressure, blood sugar, etc.) and submission to a database for evaluation by medical staff. By integrating a NFC module in devices for data acquisition, the existing processes become more efficient. In particular, the combination with a mobile phone enables a user-friendly and cost effective variant of data extraction and transmission to a backend system using the infrastructure of the mobile networks. We perform all necessary steps to integrate our modules into your portable devices or terminal solution and support you in developing the appropriate application software.

