## NFC Tag Module

# Rayson

# NFC Tag Module

# NTM-120

The NTM-120 NFC Tag Module, operating distance can up to 20 mm, contactless transmission of data and supply energy, applications for Bluetooth secure simple pairing using NFC.

### **Features**

#### RF Interface (ISO/IEC 14443A)

- Contactless transmission of data and supply energy.
- Operating distance: up to 20 mm (depending on various parameters as e.g. field strength and antenna geometry).
- Operating frequency: 13.56 MHz.
- Fast data transfer: 106 kbit/s.
- High data integrity: 16-bit CRC, parity, bit coding, bit counting.
- True anticollision.
- 7 byte serial number (cascade level 2 according to ISO/IEC 14443-3).
- Compliant to NFCForum-AD-BTSSP\_1.0
- RoHS compliant.
- Small outline: 23.2 x 11.15 x 1.5 mm.

#### EEPROM

- 168 bytes of total memory, divided in 42 pages (4 bytes each).
- 144 bytes of user r/w memory area, divided in 36 pages (4 bytes each).
- Field programmable read-only locking function per page 16 pages

#### (64 bytes) of the memory.

- Field programmable read-only locking function per block (2 pages).
- 32-bit user definable One-Time Programmable (OTP) area.
- 16-bit counter.
- Data retention of 10 years.
- Write endurance 10000 cycles.

## **Security**

- Anti-cloning support by unique 7-byte serial number for each device.
- 32-bit one way counter
- Field programmable read-only locking function per page for first 16 pages (64 bytes) of the memory.
- Read-only locking per block for rest of memory.

## **Applications**

Bluetooth Secure Simple Pairing Using NFC.

