ST25R95

NFC/RFID reader with Card Emulation mode

NFC/RFID reader IC for contactless applications

ST's ST25R95 provides multiprotocol support for 13.56 MHz NFC/RFID communications and is part of ST25R product family.
The ST25R95 portfolio offers flexible solutions for NFC/RFID, proximity and vicinity applications. Thanks to Reader/Writer and Card Emulation modes, ST25R95 allow a wide spectrum of applications including identification, authentication, product configuration, access control, door locks, industrial tag readers, and dynamic data exchanges between 2 NFC devices. With a RAM buffer up to 528 bytes, these devices ensure fast data transfers up to 848 kbit/s.

KEY FEATURES

- ISO/IEC 14443 Type A
- ISO/IEC 14443 Type B
- ISO/IEC 15693
- ISO/IEC 18092
- 13.56 MHz carrier frequency
- RAM buffer up to 528 bytes
- Card Emulation mode
- Reader/Writer mode
- 32 lead, 5x5 mm, VFQFPN 32 package

KEY BENEFITS

- Large RAM buffer for fast data transfers
- Low-power mode
- Simple implementation
- Limited BOM
- Development eco-system kits

MAIN APPLICATIONS

- Dynamic data exchange between NFC devices
- Product authentication and configuration
- Access-control devices
- Digital door locks
- Tag reader equipment for medical, industrial and commercial.

Device summary

Part number	NFC interface	RF interface	Serial interface	Buffer size	Package
ST25R95	Reader/Writer Card Emulation	ISO/IEC 14443 Type A and B ISO/IEC 15693 ISO/IEC 18092	SPI	528 bytes	VFQFPN 32

* NFC: Near Field Communication

Reference design kits

- For evaluating the ST25R95 NFC reader IC:
  The Nucleo extension board NFC03A1
  (order code: X-Nucleo-NFC03A1)

Eco-system

ST25

Support eco-system

e2e community

PC SW tools

MCU drivers (FW)

Documentation

Evaluation board

Technical support

The NFC/RFID readers and transceivers offer a simple and cost-effective implementation. ST can provide supporting material for integrating the antenna into your application: application notes, reference designs, antenna computation tools, e-presentations and e-learning documentation. For more information, visit www.st.com/nfc-rfid