

# Silica SERIZ Board

## for RFID/NFC Applications



Silica Seriz enables easy, fast and secure development of RFID and NFC applications. To migrate existing RFID products to a more secure solution the benefits of NFC can be added to the existing reader at very low additional cost.

### Hardware Features

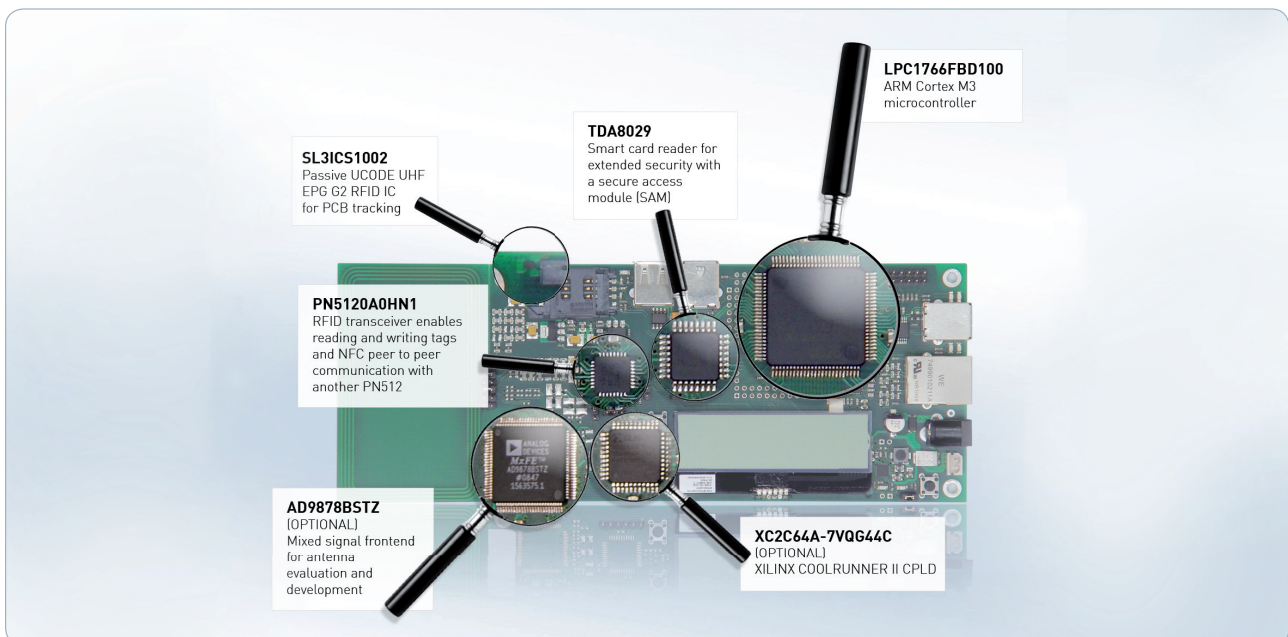
- NXP PN 512 -13.56 MHz NFC Transceiver
- TDA 8029 Single card reader for supporting SAMs (Security Access Modules)
- G2XM S0T1122- Passive UHF RFID chip for board tracking identification
- Power Amplifier (for additional reading range)
- NXP Cortex-M3 LPC1766
- USB Input voltage with rechargeable LI-ION battery
- 2 x 16 LCD display
- Ethernet Port, USB Host port, USB Device port
- JTAG and USB Debug ports

### Software Features

- Software sources ready to be compiled with the new free LPCXpresso IDE from NXP are provided
- Based on simple FreeRTOS kernel
- Supports Mifare Classic, Mifare Ultralight, Mifare Ultralight C, Mifare Desfire, Mifare Plus
- AES/3DES software libraries
- Generic support for protocols ISO 14443a, ISO 14443b, ISO 18092 (NFC peer to peer), Felica
- uIP software stack with Telnet/Web Server demo
- USB Device stack software with CDC demo
- USB Host stack with FAT16/FAT32 support

### Key Applications

- Access control
- Recognising and tracking goods
- Payment
- NFC peer to peer communication



### Ordering Information:

XYZPAYTECSERIZ01 € 270.-

For further details, please visit: [www.silica.com/seriz](http://www.silica.com/seriz)

# Electronic Business Card Reader



A GP RFID-Development Stick is the basis for an Electronic Business Card Reader.

With this plug & play capable USB stick, the data of the electronic business card can be read quickly and effortlessly. While being held closely to the USB reader stick, contact data can be imported at the push of a button into programs for contact data administration – e.g. Microsoft Outlook. When importing into Outlook, Excel or saving as vCard – the user can decide immediately what should happen to the data.

## Hardware Features

CPU	LPC1765 (Cortex-M3)
TRANSCIEVER IC	PN512
HOST INTERFACE	USB 2.0
TRANSMISSION SPEED	USB 2.0 full speed
POWER SUPPLY	BUS powered
STANDARDS	ISO/IEC 14443A/B and ISO/IEC 18092
RFID INTERFACE SPEED	Up to 424 kbit/s
OPERATING FREQUENCY	13.56 MHz
STATUS INDICATOR	1 Duo LED
POWER CONSUMPTION [MAX.]	1.8 W
TEMPERATURE RANGE	Commercial (0...70° C)
RoHS Compliant	Yes
DIMENSIONS	81 x 23 x 6 mm <sup>3</sup>

Furthermore, the latest generation of smart phones is equipped with NFC, the required technology to likewise read the data off electronic business cards and save it as contact details.

## Benefits

- Saving time by electronic storage of the business card
- Avoiding errors when importing data
- Guaranteeing homogenous storage – using a standardised format

## What is it all about?

Electronic Business Card is no attempt at replacing business cards entirely – quite to the contrary: it resembles its evolution. The electronic business card does not look any different from a traditional one. On its inside, however, state-of-the-art RFID technology is embedded to capture the printed information in electronic form and even add additional information. As the card's format, ISO 7810 standard format for credit cards (85,60 x 53,98 mm<sup>2</sup>) was chosen. To make it easy to distinguish between normal and electronic business cards, Cardolution's card has on its back a special imprint for: electronic business card.

For further details, please email: [rfid@silica.com](mailto:rfid@silica.com)