

## New “SERIZ” design tool enables highest RFID and NFC security standards

**Silica’s new SERIZ development tool gives designers what they need by introducing a new NXP–based solution for rapid development of RFID and NFC applications.**

*Poing, June 23rd 2010* – Silica, an Avnet Company, and pan-European semiconductor distributor, has extended its support for developers of RFID (radio frequency identification) and near-field communication (NFC) embedded applications by introducing the SERIZ design tool.

SERIZ provides a complete set of development tools enabling rapid design for enhanced security and compatibility to different kinds of RFID tags on the market. It also makes it easier to add the benefits of the NFC with almost no additional cost. Schematics and software sources are available for the kit and provided for free, ready to be compiled with the new free LPCXpresso IDE from NXP– an end-to-end solution enabling embedded engineers to develop their applications from initial evaluation to final production.

The kit is based on NXP’s ARM Cortex M3 LPC 1766 processor, with operating frequency up to 100 MHz, 256 kB high-speed on-chip Flash Memory and 64 kB RAM. It comes with a display and ports for Ethernet, USB Host, USB-Device and JTAG-Debugging/Programming.

The reference design for SERIZ offers MIFARE Classic as well as most up-to-date highly secure encryption systems. These are provided through using a Smartcard Reader-IC (TDA8029) in combination with a Security Access Module (SAM) with SIM-Card form factor for high secure storage of encryption keys. An integrated G2XM SOT1122 passive UHF RFID chip is included for board identification and tracking purposes.

Based on simple Free RTOS kernel, the design kit software supports Mifare Classic, Ultralight and Ultralight C cards. Migration to higher-security applications, with Common Criteria certification up to Evaluation Assurance Level 4+, is enabled with support for

Desfire and Mifare Plus. AES and Triple-3DES software libraries are included along with generic support for ISO 14443a, ISO 14443b, Felica, and ISO 18092 (NFC peer to peer) protocols.

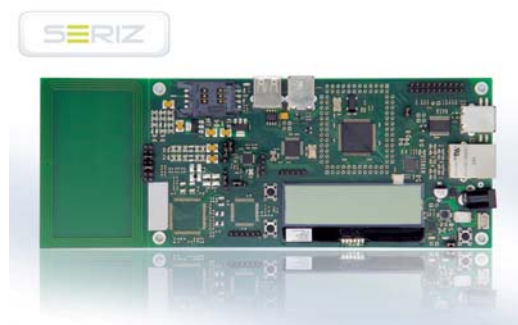
The board is based upon NXP's PN512 NFC Transceiver providing contactless communication at 13.56 MHz with baudrates of 106, 212 or 424 kbit/s. Also on the kit is a power amplifier, which can optional be used for increased reading range.

The included Telnet/Web Server demonstration based on the uIP software stack accelerates designs by providing sources for a fast implementation of network. Additional features are an USB Device stack software with a virtual COM port demo (CDC) and a USB Host stack with FAT16/FAT32 support.

SERIZ is available now from SILICA. For further details and ordering info please relate to [www.silica.com/seriz](http://www.silica.com/seriz) on the Internet.

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To download high-resolution images, go to: <http://www.silica.com/press/press-releases.html>



## **About Silica**

Silica, an Avnet, Inc. (NYSE:AVT) company, is one of the leading semiconductor distributors in Europe. Silica accelerates its customers' success by connecting 25 technology suppliers with a broad base of more than 15,000 customers and providing in-depth design support and cost-effective, value-added services and solutions. For more information, visit [www.silica.com](http://www.silica.com)

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