

STMicroelectronics, Orange, and Trusted Logic to Demonstrate Secure Mobile Phone and Payment Application

February 14 2005

STMicroelectronics showcases a vision of the future of mobile payment, digital rights management (DRM) and electronic signatures, at the 3GSM World Congress in Cannes, with a practical demonstration of a Orange secure electronic payment concept implementing Operator Virtual Machine (OVM) technology on a Nomadik™ processor. The OVM is a standard-based secure framework that hosts security demanding services.

The demonstration will allow a user to enter a PIN code on a mobile phone; the PIN will be processed on the phone's SIM card using additional specific software, and the payment information transferred securely to the vendor's point of sale terminal to complete the purchase. Such systems will be used in 3G products both as a more secure method of face-to-face payment, and for providing access to digital material such as music downloads and information resources. The mobile phone will connect to the vendor's terminal using short-range wireless technology.

The platform chosen for the secure payment system is an ST Nomadik processor, the best performing solution on the market for mobile multimedia applications. The OVM security framework has been ported to a Nomadik NDK-B platform running Linux . The OVM matches the GPD/STIP* specification for mobile devices designed for secure transactions. The OVM is implemented on the Security Module

middleware developed by Trusted Logic and commercially distributed by ARM for use with ARM-based processors such as Nomadik.

"Orange is a key partner for ST. Together, we are pioneering standard-compliant innovative security technologies for interactive multimedia and business services, such as contactless payment applications," commented Patrice Meilland, Director of Marketing for the Application Processor and Portable Platforms Division at STMicroelectronics. "We are proud of this common achievement jointly developed with Trusted Logic, which illustrates the benefits of the integration of OVM technology and Trusted Logic's Security Module with Nomadik's advanced security features. "

"Payment and DRM, but also many more services such as Device Management require a high level of security," said Laurent Coureau, strategic advisor, Orange. "We are confident that these new hardware security features, combined with an open middleware designed by the payment industry, will help set up new premium offers for the mobile services industry."

"ST's Nomadik processor provides a very convenient hardware security foundation to host Trusted Logic Security Module - our portable OVM-compliant middleware environment which leverages the underlying hardware security features," said Dominique Bolignano, Trusted Logic CEO. "Orange service developers have used Trusted Logic development tools to develop a portable payment application that has been successfully and securely integrated on the ST platform."

ST's Nomadik processor chips are intended for 2.5G/3G mobile phones, personal digital assistants and other next generation wireless products with multimedia capability, enabling these products to play music, take pictures, record video and host two-way visual communications in real time. They offer the ultra low power consumption demanded by portable

devices, unsurpassed audio and video quality, and simplified software development. Nomadik's security features take advantage of ST's long experience with smart cards.

ST is a full member of the GlobalPlatform* industry association, and an active player in all major standardization initiatives, including OMTP (Open Mobile Terminal Platform). It uses and promotes industry standards, open platforms and interoperability, with a goal of minimizing costs and time-to-market for its customers, and of encouraging the growth of new applications in the cellular market. According to the latest iSuppli rankings, ST is the 3rd largest supplier worldwide of semiconductor devices for Wireless Communications.

Citation: STMicroelectronics, Orange, and Trusted Logic to Demonstrate Secure Mobile Phone and Payment Application (2005, February 14) retrieved 26 April 2024 from <https://phys.org/news/2005-02-stmicroelectronics-orange-logic-mobile-payment.html>

<p>This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.</p>
--