Infineon and Renesas to Offer Common Smart Card Application Programmable Interface
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Infineon Technologies AG and Renesas Technology Corp., the world’s number one and number two suppliers of microcontrollers for smart cards, today announced that they will offer a common software interface for their 32-bit families of smart card microcontrollers. Such a standardised software interface will help to accelerate the development of new smart card applications, as it enables card manufacturers to re-use their application-specific software across various smart card IC platforms, which are widely used in mobile communications applications.

New requirements in major smart card market segments such as mobile communication, identification and access control applications demand the performance and address space of 32-bit microcontrollers. Market experts expect that the additional benefit of software compatibility will further accelerate the introduction of 32-bit solutions, as the smart card industry demands chip card controllers offering high performance and EEPROM memory of at least 64K bytes.

Compared to today where smart card manufacturers face significant investment to port their software to different hardware platforms, such a common application programming interface (API) can significantly reduce cost and time-to-market when developing new smart card applications, by standardising the connection between the chip hardware and the operating system. The API comprises a set of device drivers that provide a convenient interface to all hardware-specific peripherals of the smart card microcontroller including those for crypto co-processors, timers, serial UART interfaces, random number generators and memory management units.

The common API will be compatible with the companies’ respective 32-bit smart card microcontroller families, Infineon’s 88 family and Renesas’ AE5 family. As a first step, the API will offer a common interface for Renesas’ Advance Crypto Library (ACL) and Infineon’s Platform Support Layer (PSL). The API is expected to be available by the second quarter 2005.

Both, Infineon and Renesas, will continue to optimise the functionality of the API to offer maximum benefit for their respective IC platforms whilst maintaining compatibility with the existing PSL interface.

Further information on Infineon’s product portfolio of chip card ICs is available at www.infineon.com/security. Further information on Renesas’ product portfolio of chip card ICs is available at www.renesas.com.