G+D Mobile Security and SIMCom cooperate for enhanced connected car security

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Giesecke+Devrient Mobile Security will present a reference design for safe automotive telematics control units at MWC Barcelona 2019. The solution, developed jointly with SIMCom, enables OEMs in the automotive industry to produce safe control units faster.

With the new reference design, OEMs can comprehensively secure the communication between their telematics control units (TCU) and their telematics services in the cloud. It supports the mutual authentication of vehicle and cloud services and protects the transmission of data through TLS encryption. This can prevent cyber criminals from taking control of the car while driving and thereby endangering the driver's safety.

In addition, OEMs can use their TCU to protect data such as car key credentials and other sensitive information on the basis of the reference design. The data can be securely personalized and the control units can be dynamically supplied with security updates from the cloud by the G+D Trusted Service Manager Center.

The reference design combines SIMCom's SIM 7800 LTE module, specially developed for the automotive industry, with the integrated Sm@rtSIM CX 97 In-car eSE security element by G+D Mobile Security. This special safety chip is also particularly designed for use in connected cars. A TLS stack implemented on the security element of G+D Mobile Security acts as middleware for secure data transmission.

Although many current TCUs also use encrypted connections to the cloud, encryption is generally purely software-based. With the security chip by G+D Mobile Security, though, the reference design enables OEMs to provide hardware-based Common Criteria EAL5+ certified protection for their connections. This protection level makes their control units much less vulnerable to attack.

In a first project step, the new reference design was developed as a pilot solution for the Chinese market. In a second phase, it will now be internationalized for the global market.

"WLAN, 4G, NFC, Bluetooth: Cars have more and more open connections to the outside and are therefore more vulnerable than ever", says Carsten Ahrens, CEO of G+D Mobile Security. "Our reference design, developed jointly with SIMCom, secures telematic services and protects sensitive data. It helps OEMs to ensure safe driving experiences in the connected car."

Yang Tao, CEO of SIMCom, says, "With the development of IoV, the demand for automobile security is expanding. How to improve security in telematics becomes a very important issue. We are very happy to cooperate with G+D Mobile Security to launch a secure solution based on our SIM 7800 module, designed for the automotive industry. Together, we will provide a more complete solution for automotive manufacturers and Tier 1 suppliers. We look forward to providing more future-proof solutions together with G+D Mobile Security."

About SIMCom

SIMCom Wireless Solutions Co.,Ltd, a wholly owned subsidiary of SUNSEA AIOT (002313.SZ), is a global leading Machine-to-Machine (M2M) wireless modules and solutions supplier. Since being established in 2002, SIMCom has been fully committed to providing a variety of wireless technology platform modules and terminal level solutions around the world, such as GSM/GPRS/EDGE, WCDMA/HSPA/HSPA+, CDMA 1xRTT/EV-DO, FDD/TDD-LTE, LTE-M(CAT-M1), NB-IoT cellular communication and GPS/GLONASS/BEIDOU satellite positioning technology.

About G+D Mobile Security

G+D Mobile Security is a global mobile security technology company headquartered in Munich, Germany. The company is part of the Giesecke+Devrient group. G+D Mobile Security has a workforce of 5,700 employees and generated sales of approximately EUR 812 m in the 2017 fiscal year. More than 40 sales and partner offices as well as 20+ certified production and personalization sites and data centers ensure customer proximity worldwide.
G+D Mobile Security manages and secures billions of digital identities throughout their entire life cycle. Our products and solutions are used by commercial banks, mobile network operators, car and mobile device manufacturers, business enterprises, transit authorities and health insurances and their customers every day to secure payment, communication and device-to-device interaction.